

# Report of Groundwater Sampling and Analyses

For

**JEA Beverly Hills Septic Tank Phase Out**

**Jacksonville, Florida**

**MAE Project No.: 0006-0033**

**December 9, 2019**

**Prepared for:**



England, Thims & Miller, Inc.  
14775 Old St. Augustine Rd  
Jacksonville, FL 32258



**Prepared by:**



3728 Philips Highway, Suite 208  
Jacksonville, Florida 32207  
Phone (904) 519-6990  
Fax (904) 519-6992

December 9, 2019

Robert Kermitz, P.E.  
England-Thims & Miller, Inc.  
14775 Old St. Augustine Road  
Jacksonville, Florida 32258

Reference: Report of Groundwater Sampling and Analysis  
JEA Beverly Hills Septic Tank Phase Out  
Jacksonville, Florida  
MAE Project No. 0006-0033

Dear Mr. Kermitz,

**Meskel & Associates Engineering, PLLC (MAE)** is pleased to provide you with this Report of Groundwater Sampling for JEA Beverly Hills Septic Tank Phase Out project, located in Jacksonville, Duval County, Florida.

If you have any questions or concerns, please contact the undersigned at (904) 519-6990.

Sincerely,

**MESKEL & ASSOCIATES ENGINEERING, PLLC**  
MAE FL Certificate of Authorization No. 28142



Gabriel S. Pastrana, P.E.  
Professional Associate



Scott A. Davidson, P.G.  
Principal, Director of Environmental Services

Distribution: Robert Kermitz, P.E. – England-Thims & Miller

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### List of Acronyms and Abbreviations

BDL	.....	Below Detection Limits
BLS	.....	Below Land Surface
BTEX	.....	Benzene, Toluene, Ethyl benzene, and Xylenes
COC	.....	Contaminants of Concern
DO	.....	Dissolved Oxygen
DPE	.....	Dual Phase Extraction
MAE	.....	Meskel & Associates Engineering, PLLC.
EPA	.....	United States Environmental Protection Agency
FAC	.....	Florida Administrative Code
FDEP	.....	Florida Department of Environmental Protection
FL-PRO	.....	Florida Petroleum Residual Organic (testing method)
GCTL	.....	Groundwater Cleanup Target Levels (as defined in 62-777, FAC)
MSL	.....	Mean Sea Level
MTBE	.....	Methyl Tert-Butyl Ether
NADC	.....	Natural Attenuation Default Concentrations
NPDES	.....	National Pollutant Discharge Elimination System
NTU	.....	Nephelometric Turbidity Units
PAH	.....	Polycyclic Aromatic Hydrocarbons
RAP	.....	Remedial Action Plan
SVDFW	.....	Screening Values for Discharges into Fresh Waters
SVE	.....	Soil Vapor Extraction
TRPH	.....	Total Recoverable Petroleum Hydrocarbons
VCO	.....	Verbal Change Order
VOA	.....	Volatile Organic Aromatics
µg/L	.....	Micrograms per Liter

**Report of Groundwater Sampling and Analysis**

**JEA Beverly Hills-Septic Tank Phase Out**

**Jacksonville, Florida**

**MAE Project No. 0006-0033**

**Prepared by:**

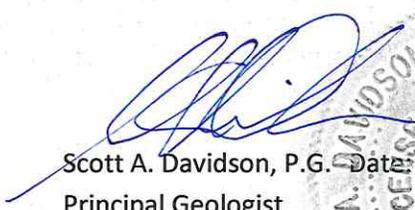
**MESKEL & ASSOCIATES ENGINEERING, PLLC**

**3728 PHILIPS HIGHWAY, SUITE 208**

**JACKSONVILLE, FLORIDA 32207**

**GEOLOGY BUSINESS LICENSE NUMBER – GB683**

In accordance with the provisions of Florida Statutes Chapter 492, this Groundwater Sampling Report for the JEA Beverly Hills Septic Tank Phase Out located in Jacksonville, Duval County, Florida has been prepared under the direct supervision of a Professional Geologist registered in the State of Florida. This report was prepared in accordance with generally accepted professional practices pursuant to Chapter 492 of the Florida Statutes. The data, findings, recommendations, specifications or professional opinions were prepared solely for the use of the JEA and England, Thims & Miller, Inc. Meskel & Associates Engineering, PLLC makes no other warranty, either expressed or implied, and is not responsible for the interpretation by others of these data.

  
Scott A. Davidson, P.G. Date: 12/19/19  
Principal Geologist  
Licensed, Florida No. PG1220



## 1.0 INTRODUCTION

Meskel & Associates Engineering, PLLC (MAE) has completed a groundwater sampling program to provide chemical background data to assist in the submittal of a Notice of Intent (NOI) to potentially discharge dewatering effluent to 'Waters of the State' through the Florida Department of Environmental Protection (FDEP) under the auspices of the *Generic Permit for the Discharge of Produced Groundwater from Any Non-Contaminated Site Activity*, FAC 62-621.300(2).

General project information contained within the JEA Solicitation No. 082-17 was reviewed for this project. In addition, specific project details and proposed utility force main routes were provided in several emails from Robert Kermitz, P.E. with England, Thims & Miller, Inc. (ETM).

The site for the subject project is located in the neighborhood of Beverly Hills, starting at Lake Park Drive and continuing to the intersection of Ida Street and Calvin Street, in Jacksonville, Florida. The general site location is shown on Figure 1.

Based on the provided information, we understand that the Beverly Hills Septic Tank Phase-Out project will include construction of a sanitary sewer force main beginning at its connection with an existing force main on Lake Park Drive. We have assumed the pipe material will be PVC and that the embedment depth (pipe invert) will be 5 feet or less below existing grade.

From the Lake Park Drive beginning, the new pipeline continues south to Palmdale Street and then continues east to Oriole Street. The pipeline then turns south along Oriole Street to Rowe Avenue, and then continues east along Rowe Avenue to Grant Avenue where it turns south. The pipeline continues south on Grant Avenue to Ida Street and turns east. The pipeline continues along Ida Street to connect to an existing force main at the intersection of Ida Street and Calvin Street. It is also understood that the Edgewood Avenue and Lem Turner Road crossings will be accomplished with HDD methods.

If the force main alignment or other details change during development of final plans, then the recommendations in this report may need to be re-evaluated. Any changes in these conditions should be provided so the need for re-evaluation of our recommendations can be assessed prior to final design.

## 2.0 REPORT LIMITATIONS

This report has been prepared for the exclusive use of ETM for specific application to the proposed JEA Beverly Hills Septic Tank Phase Out project as described in this report. This groundwater evaluation was performed in accordance with generally accepted practices of this profession, undertaken in similar studies at the same time and in the same geographical area. We have endeavored to meet this standard of care, but may be limited by conditions encountered during performance or a client-driven scope of work. Where appropriate, these limitations are discussed in the text of the report, and an evaluation of their significance with respect to our findings has been conducted.

The evaluation and recommendations contained in this report are based on the data obtained from the water samples collected for this project. The scope of our services did not include any environmental assessment or testing for the presence or absence of hazardous or toxic materials in the soil, groundwater, or surface water above/beyond those parameters and chemical analytes examined. The collection of grab water samples, such as those collected at this site, are of limited scope and cannot eliminate the potential

that hazardous, toxic, or petroleum substances are present or have been released at the site beyond what is identified by the limited water sampling and chemical analyses. No limited groundwater sampling program can wholly eliminate uncertainty regarding the potential for contamination in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for groundwater and surface water impacts. These risks may be further evaluated, but not eliminated, through additional research and/or chemical evaluation and assessment.

If changes in the design or location of the project occur, the conclusions and recommendations contained in this report may need to be modified. We recommend that these changes be provided to us for our consideration. MAE is not responsible for conclusions, interpretations, opinions or recommendations made by others based on the data contained in this report.

### 3.0 NEARBY CONTAMINATED SOURCES

This investigation included a review of FDEP databases for nearby contaminated sites. The FDEP Contamination Locator Map (CLM) was consulted to evaluate properties near the area of the proposed force main installation. <http://prodenv.dep.state.fl.us/DepClnup/welcome.do> In addition, the FDEP Institutional Controls Map (ICM) was reviewed to evaluate sites within the FDEP-specified 500-foot search radius. <https://ca.dep.state.fl.us/mapdirect/?focus=icr>

The results of the requisite FDEP database review of the CLM and ICM, showed no impacted sites within the prescribed 500-foot radius of the proposed dewatering areas.

### 4.0 TEMPORARY MONITORING WELL INSTALLATION

Two temporary monitoring wells were installed at the project site on October 10, 2019. Temporary monitoring well BH-TMW-1 was installed within the grassed northern right-of-way of Ida Street just west of Lem Turner Road. Monitoring well BH-TMW-2 was installed within the grassed western right-of-way of Oriole Street just west of Edgewood Avenue. These locations were selected as they are in the area of the HDD roadway crossings which are located adjacent to commercial properties. The locations of the temporary monitoring wells are provided on Figure 2 and Figure 3.

The monitoring wells were installed by Transamerican Drilling and Testing, Inc. using a direct push rig. Continuous soil samples were collected from the surface to a depth of 15 feet below land surface (bls) to evaluate the groundwater depth and lithology. Well depths were determined based on groundwater level conditions. BH-TMW-1 was set to 13 feet bls. BH-TMW-2 was set to 15 feet bls. The monitoring wells were constructed of 10-feet of 1-inch diameter pre-packed PVC well screen (0.010-inch slot size), and sufficient riser to reach the ground surface. The sand pre-pack screens consisted of 20-30 Silica with a fine sand seal and cement to surface. The monitoring wells were finished with a locking cap, concrete pad, and an 8-inch manhole. Appendix A contains the soil boring log and well completion data.

### 5.0 WATER SAMPLING AND ANALYTICAL RESULTS

Groundwater samples were collected from the two temporary monitoring wells BH-TMW-1 and BH-TMW-

2 on October 29, 2019. During the sampling event, depth to water was measured at 3.34 and 6.62 bls, respectively. MAE established stable purging parameters at the respective sampling locations in general accordance with the FDEP Standard Operating Procedures (FS 2212) before the location was sampled. Appendix B contains the groundwater sampling log and field equipment calibration sheets.

Following the purging activities, groundwater samples were collected from BH-TMW-1 and BH-TMW-2 using poly-tubing connected to a peristaltic pump. The collected samples were placed into laboratory-supplied bottles, stored on wet ice, and submitted to a State of Florida approved analytical laboratory, Pace Analytical Services in Ormond Beach, Florida. Pace is a NELAP-certified laboratory, Number E83079.

The groundwater samples were analyzed for the presence of Volatile Organic Compounds by EPA Method 8260, Polynuclear Aromatic Hydrocarbons (PAH) by EPA Method 8270, and the metals Arsenic, Chromium, Cadmium, and Lead by EPA Method 6010. Field filtered samples were collected for dissolved metal analysis in case turbidity interference is encountered. Copies of the groundwater analytical results are provided in Appendix C.

The results from the laboratory analysis of the groundwater samples indicated the tested analytes did not exhibit concentrations exceeding the Groundwater or Surface Water Cleanup Target Levels defined in Chapter 62-777, Florida Administrative Code.

## 6.0 CONCLUSIONS AND PERMIT REQUEST

The results of laboratory analyses of groundwater samples collected indicate that there have been no impacts to groundwater in the areas sampled.

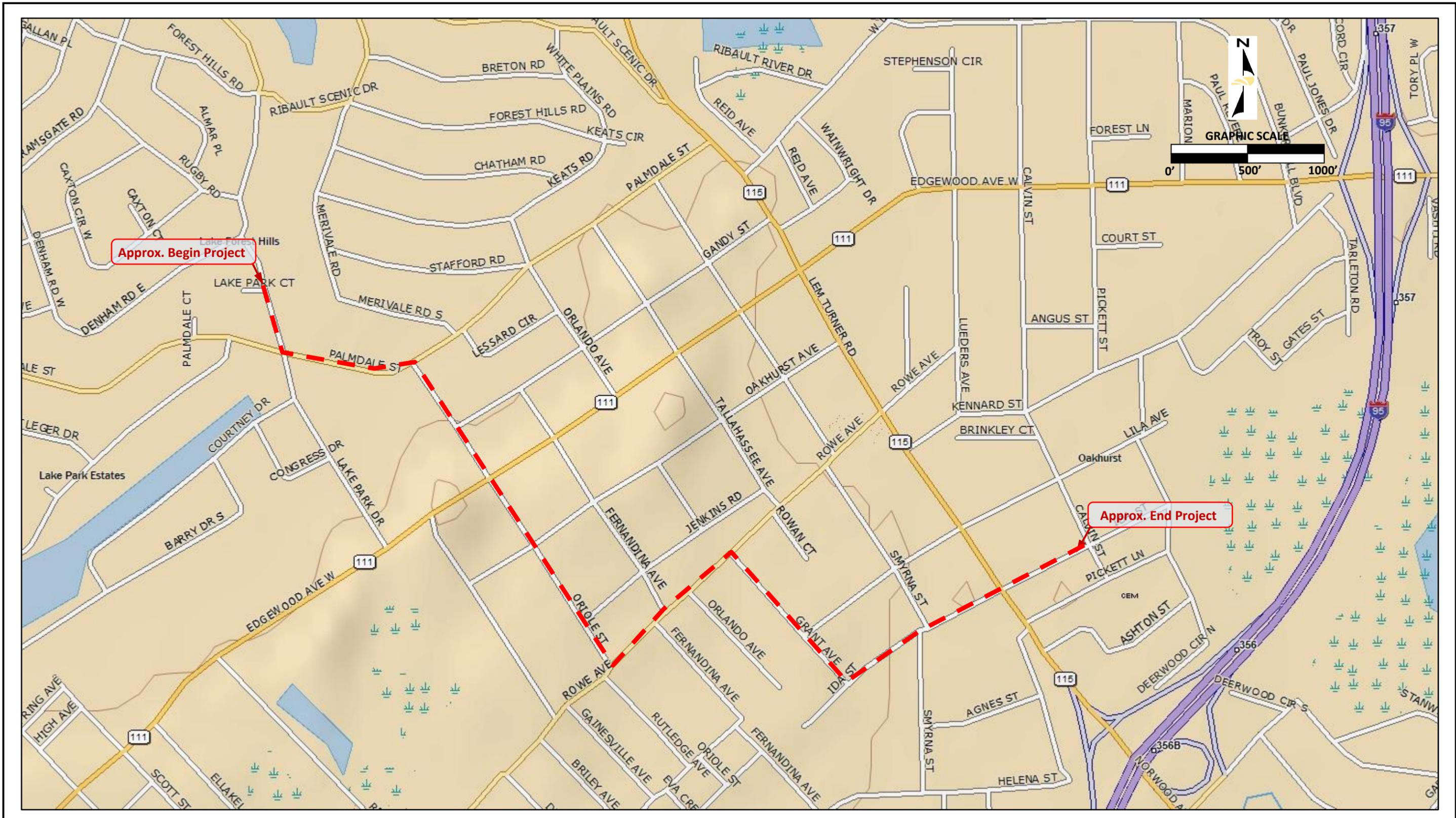
Under Chapter 62-621.300(2) FAC when applying the NOI to use the generic permit, it will be noted that the review of regulatory CLM database information indicated no Waste Cleanup facilities were identified as contaminated within 500 feet of the proposed project alignment. Based on the groundwater sampling and analytical results presented, it appears no contaminants of concern are present in the groundwater of the proposed HDD crossing locations above surface water criteria defined in Chapter 62-302.530 FAC. Therefore, a NOI request for the use of the Generic Permit for the Discharge of Groundwater from Dewatering Operations, February 2015, FAC 62-621.300(2) is applicable. A copy of the NOI application is provided include in Appendix D. However, the acquisition of a dewatering permit is not necessary if the dewatering plan includes the discharge of dewatering effluent into a JEA wastewater treatment system.

If the proposed area of dewatering is anticipated for a construction activity exceeding 1 acre in size, then MAE recommends the construction contractor acquire the dewatering permit as part of the Construction General Permit (CGP). The dewatering permit will not add any additional cost to the CGP, provided it is applied for at the time of its CGP application. The development of dewatering Best Management Practices (BMPs) will still be required prior to initiation of the dewatering operation, as per FAC 62-621.300(2).

Following the commencement of dewatering operations, per Chapter 62-621.300(2) FAC, BMPs, developed by the dewatering contractor, must be adhered to including record-keeping, and collection of effluent samples as required. Please be advised that the FDEP regulations state that the permittee is ultimately responsible for discharges to the waters of the State.

*Figures*

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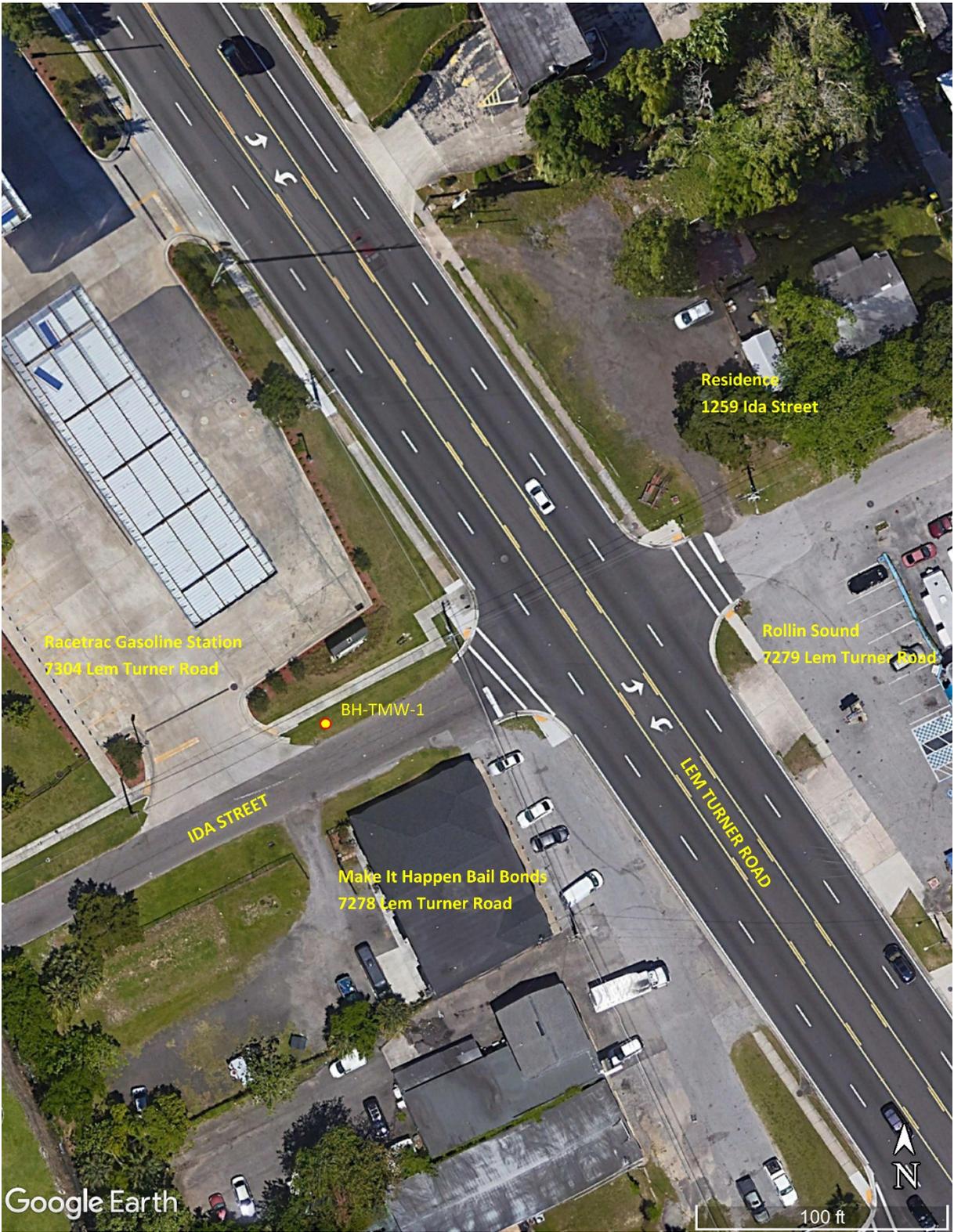
Project Manager:	PRM
Drawn by:	MCV
Checked by:	MCV
Approved by:	WJM

Project No.	0006-0033
Scale:	AS SHOWN
File Name:	0006-0033.BLP
Date:	11/1/2019



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<p>SITE LOCATION MAP</p> <p>JEA BEVERLY HILLS SEPTIC TANK PHASE OUT</p> <p>PROJECT JACKSONVILLE, FLORIDA</p>	<p>FIG NO.</p> <p>1</p>
--	-------------------------



Google Earth

100 ft

## Temporary Well Location Map - Ida Street and Lem Turner Road

PREPARED BY



PREPARED FOR

England Thims & Miller

PROJECT NAME

JEA Beverly Hills Septic Tank Phase Out  
Jacksonville, Florida

REFERENCE

Google Earth 2019

MAE PROJECT NO.

0006-0003

SCALE

As Shown

FIGURE NO.

2



## Temporary Well Location Map - Oriole Street and Edgewood Avenue

<p>PREPARED BY</p> <p style="font-size: small;">Meskel &amp; Associates Engineering Geotechnical ▸ Environmental ▸ Inspection ▸ Testing</p> <p>PREPARED FOR</p> <p style="font-weight: bold;">England Thims &amp; Miller</p>	<p>PROJECT NAME</p> <p style="font-weight: bold;">JEA Beverly Hills Septic Tank Phase Out Jacksonville, Florida</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center; vertical-align: top;"> <p>REFERENCE</p> <p>Google Earth 2019</p> <p>MAE PROJECT NO.</p> <p>0006-0003</p> </td> <td style="width: 50%; text-align: center; vertical-align: top;"> <p>SCALE</p> <p>As Shown</p> <p>FIGURE NO.</p> <p>3</p> </td> </tr> </table>	<p>REFERENCE</p> <p>Google Earth 2019</p> <p>MAE PROJECT NO.</p> <p>0006-0003</p>	<p>SCALE</p> <p>As Shown</p> <p>FIGURE NO.</p> <p>3</p>
<p>REFERENCE</p> <p>Google Earth 2019</p> <p>MAE PROJECT NO.</p> <p>0006-0003</p>	<p>SCALE</p> <p>As Shown</p> <p>FIGURE NO.</p> <p>3</p>		

*Appendix A*

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# BORING LOG

Boring/Well Number: <b>BH-TMW-1</b>		Permit Number: <b>NA</b>		FDEP Facility Identification Number: <b>NA</b>	
Site Name: <b>JEA Beverly Hills Septic Tank Phase Out</b>		Borehole Start Date: <b>10/10/19</b>	Borehole Start Time: <b>9:25</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM		
		End Date: <b>10/10/19</b>	End Time: <b>9:45</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM		
Environmental Contractor: <b>Meskel &amp; Associates Engineering PLLC</b>		Geologist's Name: <b>Scott Davidson, P.G.</b>		Field Engineer's Name: <b>Gabriel Pastrana, P.E.</b>	
Drilling Company: <b>Transamerican Drilling &amp; Testing</b>		Pavement Thickness (inches): <b>None</b>	Borehole Diameter (inches): <b>1.25'</b>	Borehole Depth (feet): <b>15</b>	
Drilling Method(s): <b>Hand Auger/Direct Push</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>4</b>	Measured Well DTW (in feet after water recharges in well): <b>4</b>	OVA (list model and check type): <b>None</b> <input type="checkbox"/> FID <input type="checkbox"/> PID		
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input checked="" type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA							1	0-5' FINE SAND; dark grey to medium grey to medium brown; no odors or staining	SP	D	
							2		SP	D	
							3		SP	M	
							4		SP	W	
							5		SP	S	
DP		60"					6	5'-6' CLAYEY SAND; light grey; no odors or staining	SC	S	
							7	6'-10' CLAY; mottled orange and light grey; low plasticity; no odors or staining	CL	S	
							8		CL	S	
							9		CL	S	
							10		CL	S	
DP		48"					11	10'-12' CLAY; light brown; medium plasticity; no odors or staining	CL	S	
							12		CL	S	

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings  
 Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

# BORING LOG

Boring/Well Number: BH-TMW-1		FDEP Facility Identification Number:			Site Name: JEA Beverly Hills		Borehole Start Date: 10/10/19		End Date: 10/10/19		
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
							13	12'-15' CLAY; light brown; medium plasticity; no odors or staining	CL	S	
						14	CL		S		
						15	CL		S		
							16	End boring BH-TMW-1 to 15 feet bls			
						17					
						18					
						19					
						20					
						21					
						22					
						23					
						24					
						25					
						26					
						27					
						28					
						29					
						30					

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated



# BORING LOG

Boring/Well Number: <b>BH-TMW-2</b>		Permit Number: <b>NA</b>		FDEP Facility Identification Number: <b>NA</b>	
Site Name: <b>JEA Beverly Hills Septic Tank Phase Out</b>		Borehole Start Date: <b>10/10/19</b>	Borehole Start Time: <b>11:10</b>	<input checked="" type="checkbox"/> AM	<input type="checkbox"/> PM
		End Date: <b>10/10/19</b>	End Time: <b>11:35</b>	<input checked="" type="checkbox"/> AM	<input type="checkbox"/> PM
Environmental Contractor: <b>Meskel &amp; Associates Engineering PLLC</b>		Geologist's Name: <b>Scott Davidson, P.G.</b>		Field Engineer's Name: <b>Gabriel Pastrana, P.E.</b>	
Drilling Company: <b>Transamerican Drilling &amp; Testing</b>		Pavement Thickness (inches): <b>None</b>	Borehole Diameter (inches): <b>1.25'</b>	Borehole Depth (feet): <b>15</b>	
Drilling Method(s): <b>Hand Auger/Direct Push</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>7</b>	Measured Well DTW (in feet after water recharges in well): <b>7</b>	OVA (list model and check type): <b>None</b> <input type="checkbox"/> FID <input type="checkbox"/> PID		
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input checked="" type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA							1	0-12' FINE SAND; light to medium brown; no odors or staining	SP	D	
							2		SP	D	
							3		SP	D	
							4		SP	D	
							5		SP	D	
DP		48"					6	Groundwater at 7 feet bls	SP	M	
							7		SP	W	
							8		SP	S	
							9		SP	S	
							10		SP	S	
							11		SP	S	
DP		48"					12		SP	S	

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings  
 Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

# BORING LOG

Boring/Well Number: BH-TMW-2		FDEP Facility Identification Number:			Site Name: JEA Beverly Hills		Borehole Start Date: 10/10/19		End Date: 10/10/19		
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
							13	12'-15' FINE SAND; light to medium brown; no odors or staining	SP	S	
						14	SP		S		
						15	SP		S		
							16	End boring BH-TMW-2 to 15 feet bls			
							17				
							18				
							19				
							20				
							21				
							22				
							23				
							24				
							25				
							26				
							27				
							28				
							29				
							30				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

## WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA				
Well Number: BH-TMW-2	Site Name: JEA Beverly Hills Septic Phase Out	FDEP Facility I.D. Number:	Well Install Date(s): 10/10/2019	
Well Location and Type (check appropriate boxes): <input type="checkbox"/> On-Site <input checked="" type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input type="checkbox"/> Above Grade (AG) <input checked="" type="checkbox"/> Flush-to-Grade If AG, list feet of riser above land surface:		Well Purpose: <input type="checkbox"/> Perched Monitoring <input checked="" type="checkbox"/> Shallow (Water-Table ) Monitoring <input type="checkbox"/> Intermediate or Deep Monitoring <input type="checkbox"/> Remediation or Other (describe)		Well Install Method: Direct Push
		Surface Casing Install Method: PVC		
Borehole Depth (feet): 15	Well Depth (feet): 15	Borehole Diameter (inches): 3	Manhole Diameter (inches): 8	Well Pad Size: <u>2</u> feet by <u>2</u> feet
Riser Diameter and Material: 1" PVC	Riser/Screen Connections: <input checked="" type="checkbox"/> Flush-Threaded <input type="checkbox"/> Other (describe)	Riser Length: <u>5</u> feet from <u>0</u> feet to <u>5</u> feet		
Screen Diameter and Material: 1" PVC		Screen Slot Size: 0.010"	Screen Length: <u>10</u> feet from <u>5</u> feet to <u>15</u> feet	
1 <sup>st</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		1 <sup>st</sup> Surface Casing I.D. (inches):	1 <sup>st</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet	
2 <sup>nd</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		2 <sup>nd</sup> Surface Casing I.D. (inches):	2 <sup>nd</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet	
3 <sup>rd</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		3 <sup>rd</sup> Surface Casing I.D. (inches):	3 <sup>rd</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet	
Filter Pack Material and Size: 20/30 Sand	Prepacked Filter Around Screen (check one): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Filter Pack Length: <u>10</u> feet from <u>5</u> feet to <u>15</u> feet	
Filter Pack Seal Material and Size:		30/60 Fine Sand	Filter Pack Seal Length: <u>2</u> feet from <u>3</u> feet to <u>5</u> feet	
Surface Seal Material:		Neat Cement	Surface Seal Length: <u>3</u> feet from <u>0</u> feet to <u>3</u> feet	

WELL DEVELOPMENT DATA			
Well Development Date: 10/10/19	Well Development Method (check one): <input type="checkbox"/> Surge/Pump <input checked="" type="checkbox"/> Pump <input type="checkbox"/> Compressed Air <input type="checkbox"/> Other (describe)		
Development Pump Type (check): <input type="checkbox"/> Centrifugal <input type="checkbox"/> Peristaltic <input checked="" type="checkbox"/> Submersible <input type="checkbox"/> Other (describe)		Depth to Groundwater (before developing in feet): 7	
Pumping Rate (gallons per minute): 0.7	Maximum Drawdown of Groundwater During Development (feet): NA		Well Purged Dry (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons): 35	Development Duration (minutes): 50	Development Water Drummed (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: Brown cloudy		Water Appearance (color and odor) At End of Development: Brown cloudy	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS
Temporary monitoring well BH-TMW-2 installed in the right-of-way southwest of the intersection of Oriole Street and Edgewood Avenue

*Appendix B*

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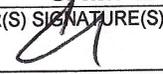
**Form FD 9000-24  
GROUNDWATER SAMPLING LOG**

SITE NAME: <u>SEA REVERBY HILLS</u>	SITE LOCATION: <u>LEM TURNERS / IDA ST.</u>
WELL NO: <u>BH-TMW-1</u>	SAMPLE ID: <u>BH-TMW-1</u> DATE: <u>10/29/2019</u>

**PURGING DATA**

WELL DIAMETER (inches): <u>2"</u>	TUBING DIAMETER (inches): <u>1/4"</u>	WELL SCREEN INTERVAL DEPTH: <u>3'</u> feet to <u>13'</u> feet	STATIC DEPTH TO WATER (feet): <u>3.34</u>	PURGE PUMP TYPE OR BAILER: <u>PP</u>							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <u>13.00</u> feet - <u>3.34</u> feet ) X <u>0.04</u> gallons/foot = <u>0.39</u> gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + ( gallons/foot X feet ) + gallons = gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>5.34</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>5.34</u>	PURGING INITIATED AT: <u>1403</u>	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) <u>µmhos/cm</u> or <u>µS/cm</u>	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
<u>1411</u>	<u>0.90</u>	<u>0.90</u>	<u>0.10</u>		<u>6.68</u>	<u>28.01</u>	<u>615</u>	<u>1.68</u>	<u>62.1</u>	<u>cloudy</u>	<u>none</u>
<u>1413</u>	<u>0.20</u>	<u>1.00</u>	<u>0.10</u>		<u>6.67</u>	<u>27.99</u>	<u>633</u>	<u>1.21</u>	<u>66.2</u>	<u>clear</u>	<u>none</u>
<u>1415</u>	<u>0.20</u>	<u>1.20</u>	<u>0.10</u>		<u>6.69</u>	<u>27.72</u>	<u>634</u>	<u>1.18</u>	<u>64.0</u>	<u>clear</u>	<u>none</u>
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <b>Gabe Pastrana / MAE</b>				SAMPLER(S) SIGNATURE(S): 				SAMPLING INITIATED AT: <u>1415</u>		SAMPLING ENDED AT: <u>1420</u>	
PUMP OR TUBING DEPTH IN WELL (feet): <u>5.34</u>				TUBING MATERIAL CODE: <u>PE/S</u>				FIELD-FILTERED: <input checked="" type="checkbox"/> N		FILTER SIZE: <u>1</u> µm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> N				TUBING Y <input checked="" type="checkbox"/> N (replaced)				DUPLICATE: Y <input checked="" type="checkbox"/> N			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
	<u>3</u>	<u>CG</u>	<u>40 mL</u>	<u>HCl</u>	<u>-</u>	<u>&lt;2</u>	<u>EPA 8260 (BTEX/M)</u>		<u>RFPP</u>	<u>&lt;90</u>	
	<u>1</u>	<u>AG</u>	<u>250 mL</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>EPA 8270 (PAH)</u>		<u>APP</u>	<u>&lt;90</u>	
	<u>2</u>	<u>PE</u>	<u>250 mL</u>	<u>HNO3</u>	<u>-</u>	<u>&lt;2</u>	<u>RCRA 4 Metals</u>		<u>APP</u>	<u>&lt;90</u>	
REMARKS: <u>FILTERED TURNING</u>											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

**Form FD 9000-24  
GROUNDWATER SAMPLING LOG**

SITE NAME: <b>SEA Beverly Hills</b>	SITE LOCATION: <b>EDGEWOOD AVE / ORIOLE ST</b>
WELL NO: <b>BH-TMW-2</b>	SAMPLE ID: <b>BH-TMW-2</b> DATE: <b>10/29/2019</b>

**PURGING DATA**

WELL DIAMETER (inches): <b>2"</b>	TUBING DIAMETER (inches): <b>1/4"</b>	WELL SCREEN INTERVAL DEPTH: <b>5 feet to 15 feet</b>	STATIC DEPTH TO WATER (feet): <b>6.62</b>	PURGE PUMP TYPE OR BAILER: <b>PP</b>							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = <b>15.00</b> feet - <b>6.62</b> feet X <b>0.04</b> gallons/foot = <b>0.34</b> gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) =                      gallons + (                      gallons/foot X                      feet) +                      gallons =                      gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>8.62</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>8.62</b>	PURGING INITIATED AT: <b>1332</b>	PURGING ENDED AT: <b>1346</b>	TOTAL VOLUME PURGED (gallons): <b>1.40</b>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) $\mu\text{mhos/cm}$ or $\mu\text{S/cm}$	DISSOLVED OXYGEN (circle units) $\text{mg/L}$ or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1340	0.80	0.80	0.10	5.80	27.77	125	0.24	85.0	100	None	
1342	0.20	1.00	0.10	5.73	27.90	123	0.23	92.1	11	None	
1344	0.20	1.20	0.10	5.81	27.76	122	0.22	90.9	11	None	
1346	0.20	1.40	0.10	5.83	27.67	120	0.21	91.5	11	None	
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <b>Gabe Pastrana / MAE</b>				SAMPLER(S) SIGNATURE(S): 				SAMPLING INITIATED AT: <b>1346</b>		SAMPLING ENDED AT: <b>1351</b>	
PUMP OR TUBING DEPTH IN WELL (feet): <b>8.62</b>				TUBING MATERIAL CODE: <b>PE/S</b>				FIELD-FILTERED: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N    FILTER SIZE: <u>1</u> $\mu\text{m}$		Filtration Equipment Type:	
FIELD DECONTAMINATION: PUMP Y <input type="checkbox"/> N <input checked="" type="checkbox"/>				TUBING Y <input type="checkbox"/> N <input checked="" type="checkbox"/> (replaced)				DUPLICATE: Y <input type="checkbox"/> N <input checked="" type="checkbox"/>			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
	3	CG	40 mL	HCl	-	<2	EPA 8260 (BTEX/M)		RFPP		
	1	AG	250 mL	-	-	-	EPA 8270 (PAH)		APP		
	2	PE	250 mL	HNO3	-	<2	RCRA 4 Metals		APP		
REMARKS: <b>RETURNED TURBIDITY = 6.98 NTU</b>											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

**NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
pH:  $\pm 0.2$  units    Temperature:  $\pm 0.2$  °C    Specific Conductance:  $\pm 5\%$     Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2); optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater)    Turbidity: all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)

*Appendix C*

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November 06, 2019

Mr. Scott A. Davidson, P.G.  
Meskel & Associates Engineering, Inc.  
8936 Western Way  
Jacksonville, FL 32256

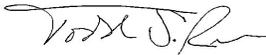
RE: Project: JEA BEVERLY HILL  
Pace Project No.: 35508497

Dear Mr. Davidson, P.G.:

Enclosed are the analytical results for sample(s) received by the laboratory on October 30, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Todd Rea  
todd.rea@pacelabs.com  
(904) 903-7948  
Project Manager

Enclosures

cc: Mr. Gabriel S. Pastrana, P.E., Pastrana Engineering &  
Environment, LLC



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: JEA BEVERLY HILL

Pace Project No.: 35508497

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### Ormond Beach Certification IDs

8 East Tower Circle, Ormond Beach, FL 32174  
Alaska DEC- CS/UST/LUST  
Alabama Certification #: 41320  
Arizona Certification# AZ0819  
Colorado Certification: FL NELAC Reciprocity  
Connecticut Certification #: PH-0216  
Delaware Certification: FL NELAC Reciprocity  
Florida Certification #: E83079  
Georgia Certification #: 955  
Guam Certification: FL NELAC Reciprocity  
Hawaii Certification: FL NELAC Reciprocity  
Illinois Certification #: 200068  
Indiana Certification: FL NELAC Reciprocity  
Kansas Certification #: E-10383  
Kentucky Certification #: 90050  
Louisiana Certification #: FL NELAC Reciprocity  
Louisiana Environmental Certificate #: 05007  
Maryland Certification: #346  
Michigan Certification #: 9911  
Mississippi Certification: FL NELAC Reciprocity

Missouri Certification #: 236  
Montana Certification #: Cert 0074  
Nebraska Certification: NE-OS-28-14  
New Hampshire Certification #: 2958  
New Jersey Certification #: FL022  
New York Certification #: 11608  
North Carolina Environmental Certificate #: 667  
North Carolina Certification #: 12710  
North Dakota Certification #: R-216  
Oklahoma Certification #: D9947  
Pennsylvania Certification #: 68-00547  
Puerto Rico Certification #: FL01264  
South Carolina Certification: #96042001  
Tennessee Certification #: TN02974  
Texas Certification: FL NELAC Reciprocity  
US Virgin Islands Certification: FL NELAC Reciprocity  
Virginia Environmental Certification #: 460165  
West Virginia Certification #: 9962C  
Wisconsin Certification #: 399079670  
Wyoming (EPA Region 8): FL NELAC Reciprocity

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: JEA BEVERLY HILL

Pace Project No.: 35508497

Lab ID	Sample ID	Matrix	Date Collected	Date Received
35508497001	BH-TMW-1	Water	10/29/19 14:15	10/30/19 12:10
35508497002	BH-TMW-2	Water	10/29/19 13:46	10/30/19 12:10

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: JEA BEVERLY HILL

Pace Project No.: 35508497

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
35508497001	BH-TMW-1	EPA 6020	AMS	4	PASI-O
		EPA 8270 by SIM	CB1	20	PASI-O
		EPA 8260	SK1	57	PASI-O
35508497002	BH-TMW-2	EPA 6020	AMS	4	PASI-O
		EPA 8270 by SIM	CB1	20	PASI-O
		EPA 8260	SK1	57	PASI-O

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: JEA BEVERLY HILL

Pace Project No.: 35508497

**Sample: BH-TMW-1**      **Lab ID: 35508497001**      Collected: 10/29/19 14:15      Received: 10/30/19 12:10      Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020    Preparation Method: EPA 3010							
Arsenic	2.7	ug/L	1.0	0.50	1	10/31/19 06:27	10/31/19 15:16	7440-38-2	
Cadmium	0.050 U	ug/L	0.10	0.050	1	10/31/19 06:27	10/31/19 15:16	7440-43-9	
Chromium	0.74 I	ug/L	1.0	0.50	1	10/31/19 06:27	10/31/19 15:16	7440-47-3	
Lead	0.50 U	ug/L	1.0	0.50	1	10/31/19 06:27	10/31/19 15:16	7439-92-1	
<b>8270 MSSV PAHLV by SIM</b>		Analytical Method: EPA 8270 by SIM    Preparation Method: EPA 3510							
Acenaphthene	0.040 U	ug/L	0.50	0.040	1	11/01/19 10:23	11/02/19 16:08	83-32-9	
Acenaphthylene	0.030 U	ug/L	0.50	0.030	1	11/01/19 10:23	11/02/19 16:08	208-96-8	
Anthracene	0.043 U	ug/L	0.50	0.043	1	11/01/19 10:23	11/02/19 16:08	120-12-7	
Benzo(a)anthracene	0.055 U	ug/L	0.10	0.055	1	11/01/19 10:23	11/02/19 16:08	56-55-3	
Benzo(a)pyrene	0.12 U	ug/L	0.20	0.12	1	11/01/19 10:23	11/02/19 16:08	50-32-8	
Benzo(b)fluoranthene	0.027 U	ug/L	0.10	0.027	1	11/01/19 10:23	11/02/19 16:08	205-99-2	
Benzo(g,h,i)perylene	0.15 U	ug/L	0.50	0.15	1	11/01/19 10:23	11/02/19 16:08	191-24-2	
Benzo(k)fluoranthene	0.16 U	ug/L	0.50	0.16	1	11/01/19 10:23	11/02/19 16:08	207-08-9	
Chrysene	0.026 U	ug/L	0.50	0.026	1	11/01/19 10:23	11/02/19 16:08	218-01-9	
Dibenz(a,h)anthracene	0.13 U	ug/L	0.15	0.13	1	11/01/19 10:23	11/02/19 16:08	53-70-3	
Fluoranthene	0.018 U	ug/L	0.50	0.018	1	11/01/19 10:23	11/02/19 16:08	206-44-0	
Fluorene	0.088 U	ug/L	0.50	0.088	1	11/01/19 10:23	11/02/19 16:08	86-73-7	
Indeno(1,2,3-cd)pyrene	0.12 U	ug/L	0.15	0.12	1	11/01/19 10:23	11/02/19 16:08	193-39-5	
1-Methylnaphthalene	0.19 U	ug/L	2.0	0.19	1	11/01/19 10:23	11/02/19 16:08	90-12-0	
2-Methylnaphthalene	0.68 U	ug/L	2.0	0.68	1	11/01/19 10:23	11/02/19 16:08	91-57-6	
Naphthalene	0.29 U	ug/L	2.0	0.29	1	11/01/19 10:23	11/02/19 16:08	91-20-3	
Phenanthrene	0.16 U	ug/L	0.50	0.16	1	11/01/19 10:23	11/02/19 16:08	85-01-8	
Pyrene	0.032 U	ug/L	0.50	0.032	1	11/01/19 10:23	11/02/19 16:08	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	65	%	38-92		1	11/01/19 10:23	11/02/19 16:08	321-60-8	
p-Terphenyl-d14 (S)	77	%	54-112		1	11/01/19 10:23	11/02/19 16:08	1718-51-0	
<b>8260 MSV</b>		Analytical Method: EPA 8260							
Acetone	12.1 I	ug/L	20.0	5.3	1		11/05/19 04:54	67-64-1	J(v3)
Acetonitrile	24.5 U	ug/L	40.0	24.5	1		11/05/19 04:54	75-05-8	J(v2)
Benzene	0.10 U	ug/L	1.0	0.10	1		11/05/19 04:54	71-43-2	
Bromochloromethane	0.37 U	ug/L	1.0	0.37	1		11/05/19 04:54	74-97-5	
Bromodichloromethane	0.19 U	ug/L	0.60	0.19	1		11/05/19 04:54	75-27-4	
Bromoform	2.6 U	ug/L	3.0	2.6	1		11/05/19 04:54	75-25-2	
Bromomethane	4.0 U	ug/L	5.0	4.0	1		11/05/19 04:54	74-83-9	J(v2)
2-Butanone (MEK)	14.3	ug/L	10.0	5.0	1		11/05/19 04:54	78-93-3	
Carbon disulfide	0.45 U	ug/L	10.0	0.45	1		11/05/19 04:54	75-15-0	
Carbon tetrachloride	0.50 U	ug/L	3.0	0.50	1		11/05/19 04:54	56-23-5	
Chlorobenzene	0.50 U	ug/L	1.0	0.50	1		11/05/19 04:54	108-90-7	
Chloroethane	3.7 U	ug/L	10.0	3.7	1		11/05/19 04:54	75-00-3	
Chloroform	0.50 U	ug/L	1.0	0.50	1		11/05/19 04:54	67-66-3	
Chloromethane	0.97 U	ug/L	1.0	0.97	1		11/05/19 04:54	74-87-3	
1,2-Dibromo-3-chloropropane	1.9 U	ug/L	5.0	1.9	1		11/05/19 04:54	96-12-8	
Dibromochloromethane	0.45 U	ug/L	2.0	0.45	1		11/05/19 04:54	124-48-1	
1,2-Dibromoethane (EDB)	0.31 U	ug/L	1.0	0.31	1		11/05/19 04:54	106-93-4	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: JEA BEVERLY HILL

Pace Project No.: 35508497

Sample: BH-TMW-1 Lab ID: 35508497001 Collected: 10/29/19 14:15 Received: 10/30/19 12:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 8260							
Dibromomethane	<b>0.68 U</b>	ug/L	2.0	0.68	1		11/05/19 04:54	74-95-3	
1,2-Dichlorobenzene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/05/19 04:54	95-50-1	
1,4-Dichlorobenzene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/05/19 04:54	106-46-7	
trans-1,4-Dichloro-2-butene	<b>2.5 U</b>	ug/L	10.0	2.5	1		11/05/19 04:54	110-57-6	
1,1-Dichloroethane	<b>0.34 U</b>	ug/L	1.0	0.34	1		11/05/19 04:54	75-34-3	
1,2-Dichloroethane	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/05/19 04:54	107-06-2	
1,2-Dichloroethene (Total)	<b>0.27 U</b>	ug/L	1.0	0.27	1		11/05/19 04:54	540-59-0	N2
1,1-Dichloroethene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/05/19 04:54	75-35-4	
cis-1,2-Dichloroethene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/05/19 04:54	156-59-2	
trans-1,2-Dichloroethene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/05/19 04:54	156-60-5	
1,2-Dichloropropane	<b>0.23 U</b>	ug/L	1.0	0.23	1		11/05/19 04:54	78-87-5	
cis-1,3-Dichloropropene	<b>0.17 U</b>	ug/L	0.50	0.17	1		11/05/19 04:54	10061-01-5	
trans-1,3-Dichloropropene	<b>0.17 U</b>	ug/L	0.50	0.17	1		11/05/19 04:54	10061-02-6	
Ethylbenzene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/05/19 04:54	100-41-4	
2-Hexanone	<b>0.85 U</b>	ug/L	10.0	0.85	1		11/05/19 04:54	591-78-6	
Iodomethane	<b>9.3 U</b>	ug/L	10.0	9.3	1		11/05/19 04:54	74-88-4	J(v2)
Isopropylbenzene (Cumene)	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/05/19 04:54	98-82-8	
Methylene Chloride	<b>2.0 U</b>	ug/L	5.0	2.0	1		11/05/19 04:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	<b>0.32 U</b>	ug/L	10.0	0.32	1		11/05/19 04:54	108-10-1	
Methyl-tert-butyl ether	<b>0.50 U</b>	ug/L	2.0	0.50	1		11/05/19 04:54	1634-04-4	
Styrene	<b>0.26 U</b>	ug/L	1.0	0.26	1		11/05/19 04:54	100-42-5	
1,1,1,2-Tetrachloroethane	<b>0.32 U</b>	ug/L	1.0	0.32	1		11/05/19 04:54	630-20-6	
1,1,1,2,2-Tetrachloroethane	<b>0.20 U</b>	ug/L	0.50	0.20	1		11/05/19 04:54	79-34-5	
Tetrachloroethene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/05/19 04:54	127-18-4	
Toluene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/05/19 04:54	108-88-3	
1,1,1-Trichloroethane	<b>0.30 U</b>	ug/L	1.0	0.30	1		11/05/19 04:54	71-55-6	
1,1,2-Trichloroethane	<b>0.30 U</b>	ug/L	1.0	0.30	1		11/05/19 04:54	79-00-5	
Trichloroethene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/05/19 04:54	79-01-6	
Trichlorofluoromethane	<b>0.35 U</b>	ug/L	1.0	0.35	1		11/05/19 04:54	75-69-4	
1,2,3-Trichloropropane	<b>1.1 U</b>	ug/L	2.0	1.1	1		11/05/19 04:54	96-18-4	
1,2,4-Trimethylbenzene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/05/19 04:54	95-63-6	
1,3,5-Trimethylbenzene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/05/19 04:54	108-67-8	
Vinyl acetate	<b>0.19 U</b>	ug/L	10.0	0.19	1		11/05/19 04:54	108-05-4	
Vinyl chloride	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/05/19 04:54	75-01-4	
Xylene (Total)	<b>1.0 U</b>	ug/L	5.0	1.0	1		11/05/19 04:54	1330-20-7	
m&p-Xylene	<b>1.0 U</b>	ug/L	4.0	1.0	1		11/05/19 04:54	179601-23-1	
o-Xylene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/05/19 04:54	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	94	%	70-130		1		11/05/19 04:54	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130		1		11/05/19 04:54	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		11/05/19 04:54	2037-26-5	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: JEA BEVERLY HILL

Pace Project No.: 35508497

**Sample: BH-TMW-2**      **Lab ID: 35508497002**      Collected: 10/29/19 13:46      Received: 10/30/19 12:10      Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b> Analytical Method: EPA 6020      Preparation Method: EPA 3010									
Arsenic	<b>0.50 U</b>	ug/L	1.0	0.50	1	10/31/19 06:27	10/31/19 15:22	7440-38-2	
Cadmium	<b>0.050 U</b>	ug/L	0.10	0.050	1	10/31/19 06:27	10/31/19 15:22	7440-43-9	
Chromium	<b>2.4</b>	ug/L	1.0	0.50	1	10/31/19 06:27	10/31/19 15:22	7440-47-3	
Lead	<b>1.2</b>	ug/L	1.0	0.50	1	10/31/19 06:27	10/31/19 15:22	7439-92-1	
<b>8270 MSSV PAHLV by SIM</b> Analytical Method: EPA 8270 by SIM      Preparation Method: EPA 3510									
Acenaphthene	<b>0.040 U</b>	ug/L	0.50	0.040	1	11/01/19 10:23	11/02/19 18:43	83-32-9	
Acenaphthylene	<b>0.030 U</b>	ug/L	0.50	0.030	1	11/01/19 10:23	11/02/19 18:43	208-96-8	
Anthracene	<b>0.043 U</b>	ug/L	0.50	0.043	1	11/01/19 10:23	11/02/19 18:43	120-12-7	
Benzo(a)anthracene	<b>0.055 U</b>	ug/L	0.10	0.055	1	11/01/19 10:23	11/02/19 18:43	56-55-3	
Benzo(a)pyrene	<b>0.12 U</b>	ug/L	0.20	0.12	1	11/01/19 10:23	11/02/19 18:43	50-32-8	
Benzo(b)fluoranthene	<b>0.027 U</b>	ug/L	0.10	0.027	1	11/01/19 10:23	11/02/19 18:43	205-99-2	
Benzo(g,h,i)perylene	<b>0.15 U</b>	ug/L	0.50	0.15	1	11/01/19 10:23	11/02/19 18:43	191-24-2	
Benzo(k)fluoranthene	<b>0.16 U</b>	ug/L	0.50	0.16	1	11/01/19 10:23	11/02/19 18:43	207-08-9	
Chrysene	<b>0.026 U</b>	ug/L	0.50	0.026	1	11/01/19 10:23	11/02/19 18:43	218-01-9	
Dibenz(a,h)anthracene	<b>0.13 U</b>	ug/L	0.15	0.13	1	11/01/19 10:23	11/02/19 18:43	53-70-3	
Fluoranthene	<b>0.018 U</b>	ug/L	0.50	0.018	1	11/01/19 10:23	11/02/19 18:43	206-44-0	
Fluorene	<b>0.088 U</b>	ug/L	0.50	0.088	1	11/01/19 10:23	11/02/19 18:43	86-73-7	
Indeno(1,2,3-cd)pyrene	<b>0.12 U</b>	ug/L	0.15	0.12	1	11/01/19 10:23	11/02/19 18:43	193-39-5	
1-Methylnaphthalene	<b>0.19 U</b>	ug/L	2.0	0.19	1	11/01/19 10:23	11/02/19 18:43	90-12-0	
2-Methylnaphthalene	<b>0.68 U</b>	ug/L	2.0	0.68	1	11/01/19 10:23	11/02/19 18:43	91-57-6	
Naphthalene	<b>0.29 U</b>	ug/L	2.0	0.29	1	11/01/19 10:23	11/02/19 18:43	91-20-3	
Phenanthrene	<b>0.16 U</b>	ug/L	0.50	0.16	1	11/01/19 10:23	11/02/19 18:43	85-01-8	
Pyrene	<b>0.032 U</b>	ug/L	0.50	0.032	1	11/01/19 10:23	11/02/19 18:43	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	67	%	38-92		1	11/01/19 10:23	11/02/19 18:43	321-60-8	
p-Terphenyl-d14 (S)	75	%	54-112		1	11/01/19 10:23	11/02/19 18:43	1718-51-0	
<b>8260 MSV</b> Analytical Method: EPA 8260									
Acetone	<b>5.3 U</b>	ug/L	20.0	5.3	1		11/04/19 07:14	67-64-1	J(v2)
Acetonitrile	<b>24.5 U</b>	ug/L	40.0	24.5	1		11/04/19 07:14	75-05-8	J(v2)
Benzene	<b>0.10 U</b>	ug/L	1.0	0.10	1		11/04/19 07:14	71-43-2	
Bromochloromethane	<b>0.37 U</b>	ug/L	1.0	0.37	1		11/04/19 07:14	74-97-5	
Bromodichloromethane	<b>0.19 U</b>	ug/L	0.60	0.19	1		11/04/19 07:14	75-27-4	
Bromoform	<b>2.6 U</b>	ug/L	3.0	2.6	1		11/04/19 07:14	75-25-2	
Bromomethane	<b>4.0 U</b>	ug/L	5.0	4.0	1		11/04/19 07:14	74-83-9	J(v2)
2-Butanone (MEK)	<b>5.0 U</b>	ug/L	10.0	5.0	1		11/04/19 07:14	78-93-3	J(v2)
Carbon disulfide	<b>0.45 U</b>	ug/L	10.0	0.45	1		11/04/19 07:14	75-15-0	
Carbon tetrachloride	<b>0.50 U</b>	ug/L	3.0	0.50	1		11/04/19 07:14	56-23-5	
Chlorobenzene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/04/19 07:14	108-90-7	
Chloroethane	<b>3.7 U</b>	ug/L	10.0	3.7	1		11/04/19 07:14	75-00-3	
Chloroform	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/04/19 07:14	67-66-3	
Chloromethane	<b>0.97 U</b>	ug/L	1.0	0.97	1		11/04/19 07:14	74-87-3	J(v2)
1,2-Dibromo-3-chloropropane	<b>1.9 U</b>	ug/L	5.0	1.9	1		11/04/19 07:14	96-12-8	
Dibromochloromethane	<b>0.45 U</b>	ug/L	2.0	0.45	1		11/04/19 07:14	124-48-1	
1,2-Dibromoethane (EDB)	<b>0.31 U</b>	ug/L	1.0	0.31	1		11/04/19 07:14	106-93-4	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: JEA BEVERLY HILL

Pace Project No.: 35508497

**Sample: BH-TMW-2**      **Lab ID: 35508497002**      Collected: 10/29/19 13:46      Received: 10/30/19 12:10      Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 8260									
Dibromomethane	<b>0.68 U</b>	ug/L	2.0	0.68	1		11/04/19 07:14	74-95-3	
1,2-Dichlorobenzene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/04/19 07:14	95-50-1	
1,4-Dichlorobenzene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/04/19 07:14	106-46-7	
trans-1,4-Dichloro-2-butene	<b>2.5 U</b>	ug/L	10.0	2.5	1		11/04/19 07:14	110-57-6	J(v2)
1,1-Dichloroethane	<b>0.34 U</b>	ug/L	1.0	0.34	1		11/04/19 07:14	75-34-3	
1,2-Dichloroethane	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/04/19 07:14	107-06-2	
1,2-Dichloroethene (Total)	<b>0.27 U</b>	ug/L	1.0	0.27	1		11/04/19 07:14	540-59-0	N2
1,1-Dichloroethene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/04/19 07:14	75-35-4	
cis-1,2-Dichloroethene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/04/19 07:14	156-59-2	
trans-1,2-Dichloroethene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/04/19 07:14	156-60-5	
1,2-Dichloropropane	<b>0.23 U</b>	ug/L	1.0	0.23	1		11/04/19 07:14	78-87-5	
cis-1,3-Dichloropropene	<b>0.17 U</b>	ug/L	0.50	0.17	1		11/04/19 07:14	10061-01-5	
trans-1,3-Dichloropropene	<b>0.17 U</b>	ug/L	0.50	0.17	1		11/04/19 07:14	10061-02-6	
Ethylbenzene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/04/19 07:14	100-41-4	
2-Hexanone	<b>0.85 U</b>	ug/L	10.0	0.85	1		11/04/19 07:14	591-78-6	
Iodomethane	<b>9.3 U</b>	ug/L	10.0	9.3	1		11/04/19 07:14	74-88-4	J(L2), J(v2)
Isopropylbenzene (Cumene)	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/04/19 07:14	98-82-8	
Methylene Chloride	<b>2.0 U</b>	ug/L	5.0	2.0	1		11/04/19 07:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	<b>0.32 U</b>	ug/L	10.0	0.32	1		11/04/19 07:14	108-10-1	
Methyl-tert-butyl ether	<b>0.50 U</b>	ug/L	2.0	0.50	1		11/04/19 07:14	1634-04-4	
Styrene	<b>0.26 U</b>	ug/L	1.0	0.26	1		11/04/19 07:14	100-42-5	
1,1,1,2-Tetrachloroethane	<b>0.32 U</b>	ug/L	1.0	0.32	1		11/04/19 07:14	630-20-6	
1,1,2,2-Tetrachloroethane	<b>0.20 U</b>	ug/L	0.50	0.20	1		11/04/19 07:14	79-34-5	
Tetrachloroethene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/04/19 07:14	127-18-4	
Toluene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/04/19 07:14	108-88-3	
1,1,1-Trichloroethane	<b>0.30 U</b>	ug/L	1.0	0.30	1		11/04/19 07:14	71-55-6	
1,1,2-Trichloroethane	<b>0.30 U</b>	ug/L	1.0	0.30	1		11/04/19 07:14	79-00-5	
Trichloroethene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/04/19 07:14	79-01-6	
Trichlorofluoromethane	<b>0.35 U</b>	ug/L	1.0	0.35	1		11/04/19 07:14	75-69-4	
1,2,3-Trichloropropane	<b>1.1 U</b>	ug/L	2.0	1.1	1		11/04/19 07:14	96-18-4	
1,2,4-Trimethylbenzene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/04/19 07:14	95-63-6	
1,3,5-Trimethylbenzene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/04/19 07:14	108-67-8	
Vinyl acetate	<b>0.19 U</b>	ug/L	10.0	0.19	1		11/04/19 07:14	108-05-4	
Vinyl chloride	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/04/19 07:14	75-01-4	
Xylene (Total)	<b>1.0 U</b>	ug/L	5.0	1.0	1		11/04/19 07:14	1330-20-7	
m&p-Xylene	<b>1.0 U</b>	ug/L	4.0	1.0	1		11/04/19 07:14	179601-23-1	
o-Xylene	<b>0.50 U</b>	ug/L	1.0	0.50	1		11/04/19 07:14	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	94	%	70-130		1		11/04/19 07:14	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130		1		11/04/19 07:14	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		11/04/19 07:14	2037-26-5	

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: JEA BEVERLY HILL

Pace Project No.: 35508497

QC Batch: 583134 Analysis Method: EPA 6020  
 QC Batch Method: EPA 3010 Analysis Description: 6020 MET  
 Associated Lab Samples: 35508497001, 35508497002

METHOD BLANK: 3170484 Matrix: Water

Associated Lab Samples: 35508497001, 35508497002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	ug/L	0.50 U	1.0	0.50	10/31/19 15:04	
Cadmium	ug/L	0.050 U	0.10	0.050	10/31/19 15:04	
Chromium	ug/L	0.50 U	1.0	0.50	10/31/19 15:04	
Lead	ug/L	0.50 U	1.0	0.50	10/31/19 15:04	

LABORATORY CONTROL SAMPLE: 3170485

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	50	48.5	97	80-120	
Cadmium	ug/L	5	5.3	105	80-120	
Chromium	ug/L	50	50.5	101	80-120	
Lead	ug/L	50	52.2	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3170486 3170487

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	1.5	50	50	50.8	50.6	99	98	75-125	0	20	
Cadmium	ug/L	0.050 U	5	5	4.8	4.8	96	96	75-125	0	20	
Chromium	ug/L	0.50 U	50	50	50.3	49.2	100	98	75-125	2	20	
Lead	ug/L	4.6	50	50	51.5	51.6	94	94	75-125	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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### QUALITY CONTROL DATA

Project: JEA BEVERLY HILL  
Pace Project No.: 35508497

QC Batch: 583908 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV  
Associated Lab Samples: 35508497002

METHOD BLANK: 3175041 Matrix: Water  
Associated Lab Samples: 35508497002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	1.0	0.32	11/03/19 21:56	
1,1,1-Trichloroethane	ug/L	0.30 U	1.0	0.30	11/03/19 21:56	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	0.50	0.20	11/03/19 21:56	
1,1,2-Trichloroethane	ug/L	0.30 U	1.0	0.30	11/03/19 21:56	
1,1-Dichloroethane	ug/L	0.34 U	1.0	0.34	11/03/19 21:56	
1,1-Dichloroethene	ug/L	0.50 U	1.0	0.50	11/03/19 21:56	
1,2,3-Trichloropropane	ug/L	1.1 U	2.0	1.1	11/03/19 21:56	
1,2,4-Trimethylbenzene	ug/L	0.50 U	1.0	0.50	11/03/19 21:56	J(v2)
1,2-Dibromo-3-chloropropane	ug/L	1.9 U	5.0	1.9	11/03/19 21:56	
1,2-Dibromoethane (EDB)	ug/L	0.31 U	1.0	0.31	11/03/19 21:56	
1,2-Dichlorobenzene	ug/L	0.50 U	1.0	0.50	11/03/19 21:56	
1,2-Dichloroethane	ug/L	0.50 U	1.0	0.50	11/03/19 21:56	
1,2-Dichloroethene (Total)	ug/L	0.27 U	1.0	0.27	11/03/19 21:56	N2
1,2-Dichloropropane	ug/L	0.23 U	1.0	0.23	11/03/19 21:56	
1,3,5-Trimethylbenzene	ug/L	0.50 U	1.0	0.50	11/03/19 21:56	
1,4-Dichlorobenzene	ug/L	0.50 U	1.0	0.50	11/03/19 21:56	
2-Butanone (MEK)	ug/L	5.0 U	10.0	5.0	11/03/19 21:56	J(v2)
2-Hexanone	ug/L	0.85 U	10.0	0.85	11/03/19 21:56	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	10.0	0.32	11/03/19 21:56	
Acetone	ug/L	5.3 U	20.0	5.3	11/03/19 21:56	J(v2)
Acetonitrile	ug/L	24.5 U	40.0	24.5	11/03/19 21:56	J(v2)
Benzene	ug/L	0.10 U	1.0	0.10	11/03/19 21:56	
Bromochloromethane	ug/L	0.37 U	1.0	0.37	11/03/19 21:56	
Bromodichloromethane	ug/L	0.19 U	0.60	0.19	11/03/19 21:56	
Bromoform	ug/L	2.6 U	3.0	2.6	11/03/19 21:56	
Bromomethane	ug/L	4.0 U	5.0	4.0	11/03/19 21:56	J(v2)
Carbon disulfide	ug/L	0.45 U	10.0	0.45	11/03/19 21:56	
Carbon tetrachloride	ug/L	0.50 U	3.0	0.50	11/03/19 21:56	
Chlorobenzene	ug/L	0.50 U	1.0	0.50	11/03/19 21:56	
Chloroethane	ug/L	3.7 U	10.0	3.7	11/03/19 21:56	
Chloroform	ug/L	0.50 U	1.0	0.50	11/03/19 21:56	
Chloromethane	ug/L	0.97 U	1.0	0.97	11/03/19 21:56	J(v2)
cis-1,2-Dichloroethene	ug/L	0.50 U	1.0	0.50	11/03/19 21:56	
cis-1,3-Dichloropropene	ug/L	0.17 U	0.50	0.17	11/03/19 21:56	
Dibromochloromethane	ug/L	0.45 U	2.0	0.45	11/03/19 21:56	
Dibromomethane	ug/L	0.68 U	2.0	0.68	11/03/19 21:56	
Ethylbenzene	ug/L	0.50 U	1.0	0.50	11/03/19 21:56	
Iodomethane	ug/L	9.3 U	10.0	9.3	11/03/19 21:56	J(v2)
Isopropylbenzene (Cumene)	ug/L	0.50 U	1.0	0.50	11/03/19 21:56	
m&p-Xylene	ug/L	1.0 U	4.0	1.0	11/03/19 21:56	
Methyl-tert-butyl ether	ug/L	0.50 U	2.0	0.50	11/03/19 21:56	

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### QUALITY CONTROL DATA

Project: JEA BEVERLY HILL  
Pace Project No.: 35508497

METHOD BLANK: 3175041

Matrix: Water

Associated Lab Samples: 35508497002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Methylene Chloride	ug/L	2.0 U	5.0	2.0	11/03/19 21:56	
o-Xylene	ug/L	0.50 U	1.0	0.50	11/03/19 21:56	
Styrene	ug/L	0.26 U	1.0	0.26	11/03/19 21:56	
Tetrachloroethene	ug/L	0.50 U	1.0	0.50	11/03/19 21:56	
Toluene	ug/L	0.50 U	1.0	0.50	11/03/19 21:56	
trans-1,2-Dichloroethene	ug/L	0.50 U	1.0	0.50	11/03/19 21:56	
trans-1,3-Dichloropropene	ug/L	0.17 U	0.50	0.17	11/03/19 21:56	
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	10.0	2.5	11/03/19 21:56	J(v2)
Trichloroethene	ug/L	0.50 U	1.0	0.50	11/03/19 21:56	
Trichlorofluoromethane	ug/L	0.35 U	1.0	0.35	11/03/19 21:56	
Vinyl acetate	ug/L	0.19 U	10.0	0.19	11/03/19 21:56	
Vinyl chloride	ug/L	0.50 U	1.0	0.50	11/03/19 21:56	
Xylene (Total)	ug/L	1.0 U	5.0	1.0	11/03/19 21:56	
1,2-Dichloroethane-d4 (S)	%	102	70-130		11/03/19 21:56	
4-Bromofluorobenzene (S)	%	100	70-130		11/03/19 21:56	
Toluene-d8 (S)	%	104	70-130		11/03/19 21:56	

LABORATORY CONTROL SAMPLE: 3175042

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	20.5	102	70-130	
1,1,1-Trichloroethane	ug/L	20	20.7	103	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	18.8	94	68-125	
1,1,2-Trichloroethane	ug/L	20	19.2	96	70-130	
1,1-Dichloroethane	ug/L	20	19.7	99	70-130	
1,1-Dichloroethene	ug/L	20	19.3	96	66-133	
1,2,3-Trichloropropane	ug/L	20	17.9	90	62-127	
1,2,4-Trimethylbenzene	ug/L	20	19.8	99	70-130	
1,2-Dibromo-3-chloropropane	ug/L	20	16.4	82	45-137	
1,2-Dibromoethane (EDB)	ug/L	20	19.8	99	70-130	
1,2-Dichlorobenzene	ug/L	20	19.1	96	70-130	
1,2-Dichloroethane	ug/L	20	16.7	84	70-130	
1,2-Dichloroethene (Total)	ug/L	40	35.6	89	70-130	N2
1,2-Dichloropropane	ug/L	20	19.2	96	70-130	
1,3,5-Trimethylbenzene	ug/L	20	19.7	98	70-130	
1,4-Dichlorobenzene	ug/L	20	18.8	94	70-130	
2-Butanone (MEK)	ug/L	40	30.7	77	47-143	J(v3)
2-Hexanone	ug/L	40	32.3	81	48-145	
4-Methyl-2-pentanone (MIBK)	ug/L	40	34.0	85	57-132	
Acetone	ug/L	40	23.9	60	46-148	J(v3)
Acetonitrile	ug/L	200	137	69	33-175	J(v3)
Benzene	ug/L	20	19.5	98	70-130	
Bromochloromethane	ug/L	20	18.3	92	70-130	
Bromodichloromethane	ug/L	20	19.6	98	70-130	

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### QUALITY CONTROL DATA

Project: JEA BEVERLY HILL

Pace Project No.: 35508497

LABORATORY CONTROL SAMPLE: 3175042

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromoform	ug/L	20	17.3	86	49-126	
Bromomethane	ug/L	20	4.0 U	13	10-165	J(v3)
Carbon disulfide	ug/L	20	19.4	97	60-141	
Carbon tetrachloride	ug/L	20	19.5	98	63-126	
Chlorobenzene	ug/L	20	19.1	95	70-130	
Chloroethane	ug/L	20	20.6	103	71-142	
Chloroform	ug/L	20	19.2	96	70-130	
Chloromethane	ug/L	20	14.6	73	40-140	J(v3)
cis-1,2-Dichloroethene	ug/L	20	18.3	92	70-130	
cis-1,3-Dichloropropene	ug/L	20	18.1	91	70-130	
Dibromochloromethane	ug/L	20	17.8	89	62-118	
Dibromomethane	ug/L	20	18.3	92	70-130	
Ethylbenzene	ug/L	20	19.8	99	70-130	
Iodomethane	ug/L	40	9.3 U	7	10-164	J(L2),J(v3)
Isopropylbenzene (Cumene)	ug/L	20	21.1	106	70-130	
m&p-Xylene	ug/L	40	40.8	102	70-130	
Methyl-tert-butyl ether	ug/L	20	17.2	86	64-124	
Methylene Chloride	ug/L	20	18.3	92	65-136	
o-Xylene	ug/L	20	19.6	98	70-130	
Styrene	ug/L	20	20.9	105	70-130	
Tetrachloroethene	ug/L	20	19.5	98	64-134	
Toluene	ug/L	20	20.1	101	70-130	
trans-1,2-Dichloroethene	ug/L	20	17.3	86	68-127	
trans-1,3-Dichloropropene	ug/L	20	18.1	90	65-121	
trans-1,4-Dichloro-2-butene	ug/L	20	15.5	78	42-129	J(v3)
Trichloroethene	ug/L	20	18.8	94	70-130	
Trichlorofluoromethane	ug/L	20	20.4	102	65-135	
Vinyl acetate	ug/L	20	16.4	82	60-144	
Vinyl chloride	ug/L	20	18.8	94	68-131	
Xylene (Total)	ug/L	60	60.3	101	70-130	
1,2-Dichloroethane-d4 (S)	%			96	70-130	
4-Bromofluorobenzene (S)	%			103	70-130	
Toluene-d8 (S)	%			99	70-130	

MATRIX SPIKE SAMPLE: 3175044

Parameter	Units	35508182003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	20	18.3	91	70-130	
1,1,1-Trichloroethane	ug/L	0.30 U	20	19.7	99	70-130	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	20	19.3	96	68-125	
1,1,2-Trichloroethane	ug/L	0.30 U	20	18.4	92	70-130	
1,1-Dichloroethane	ug/L	0.34 U	20	18.5	93	70-130	
1,1-Dichloroethene	ug/L	0.50 U	20	18.9	94	66-133	
1,2,3-Trichloropropane	ug/L	1.1 U	20	15.9	80	62-127	
1,2,4-Trimethylbenzene	ug/L	0.50 U	20	18.5	92	70-130	

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### QUALITY CONTROL DATA

Project: JEA BEVERLY HILL

Pace Project No.: 35508497

MATRIX SPIKE SAMPLE: 3175044		35508182003	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	1.9 U	20	17.5	87	45-137	
1,2-Dibromoethane (EDB)	ug/L	0.31 U	20	18.5	93	70-130	
1,2-Dichlorobenzene	ug/L	0.50 U	20	17.6	88	70-130	
1,2-Dichloroethane	ug/L	0.50 U	20	16.0	80	70-130	
1,2-Dichloroethene (Total)	ug/L	0.27 U	40	33.4	83	70-130	N2
1,2-Dichloropropane	ug/L	0.23 U	20	17.9	89	70-130	
1,3,5-Trimethylbenzene	ug/L	0.50 U	20	18.4	92	70-130	
1,4-Dichlorobenzene	ug/L	0.50 U	20	17.4	87	70-130	
2-Butanone (MEK)	ug/L	5.0 U	40	29.9	75	47-143	J(v3)
2-Hexanone	ug/L	0.85 U	40	34.7	87	48-145	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	40	35.7	89	57-132	
Acetone	ug/L	5.3 U	40	25.3	63	46-148	J(v3)
Acetonitrile	ug/L	24.5 U	200	160	80	33-175	J(v3)
Benzene	ug/L	0.10 U	20	18.1	91	70-130	
Bromochloromethane	ug/L	0.37 U	20	16.7	83	70-130	
Bromodichloromethane	ug/L	0.19 U	20	18.0	90	70-130	
Bromoform	ug/L	2.6 U	20	15.4	77	49-126	
Bromomethane	ug/L	4.0 U	20	4.0 U	5	10-165	J(M1),J(v2)
Carbon disulfide	ug/L	0.45 U	20	16.4	81	60-141	
Carbon tetrachloride	ug/L	0.50 U	20	18.7	93	63-126	
Chlorobenzene	ug/L	0.50 U	20	17.4	87	70-130	
Chloroethane	ug/L	3.7 U	20	19.4	97	71-142	
Chloroform	ug/L	0.50 U	20	17.6	88	70-130	
Chloromethane	ug/L	0.97 U	20	12.9	65	40-140	J(v3)
cis-1,2-Dichloroethene	ug/L	0.50 U	20	17.0	85	70-130	
cis-1,3-Dichloropropene	ug/L	0.17 U	20	15.1	75	70-130	
Dibromochloromethane	ug/L	0.45 U	20	16.1	81	62-118	
Dibromomethane	ug/L	0.68 U	20	16.8	84	70-130	
Ethylbenzene	ug/L	0.50 U	20	18.2	91	70-130	
Iodomethane	ug/L	9.3 U	40	9.3 U	3	10-164	J(M0),J(v2)
Isopropylbenzene (Cumene)	ug/L	0.50 U	20	18.9	95	70-130	
m&p-Xylene	ug/L	1.0 U	40	36.9	92	70-130	
Methyl-tert-butyl ether	ug/L	0.50 U	20	16.1	80	64-124	
Methylene Chloride	ug/L	2.0 U	20	17.3	86	65-136	
o-Xylene	ug/L	0.50 U	20	17.7	89	70-130	
Styrene	ug/L	0.26 U	20	18.1	91	70-130	
Tetrachloroethene	ug/L	0.50 U	20	17.2	86	64-134	
Toluene	ug/L	0.50 U	20	19.2	96	70-130	
trans-1,2-Dichloroethene	ug/L	0.50 U	20	16.4	82	68-127	
trans-1,3-Dichloropropene	ug/L	0.17 U	20	16.2	81	65-121	
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	20	13.1	66	42-129	J(v2)
Trichloroethene	ug/L	0.50 U	20	17.2	86	70-130	
Trichlorofluoromethane	ug/L	0.35 U	20	15.5	77	65-135	
Vinyl acetate	ug/L	0.19 U	20	13.5	67	60-144	
Vinyl chloride	ug/L	0.50 U	20	15.7	79	68-131	
Xylene (Total)	ug/L	1.0 U	60	54.7	91	70-130	
1,2-Dichloroethane-d4 (S)	%				100	70-130	

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### QUALITY CONTROL DATA

Project: JEA BEVERLY HILL

Pace Project No.: 35508497

MATRIX SPIKE SAMPLE: 3175044		35508182003	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
4-Bromofluorobenzene (S)	%				97	70-130	
Toluene-d8 (S)	%				98	70-130	

SAMPLE DUPLICATE: 3175043

Parameter	Units	35508182002	Dup	RPD	Max	Qualifiers
		Result	Result		RPD	
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	0.32 U		40	
1,1,1-Trichloroethane	ug/L	0.30 U	0.30 U		40	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	0.20 U		40	
1,1,2-Trichloroethane	ug/L	0.30 U	0.30 U		40	
1,1-Dichloroethane	ug/L	0.34 U	0.34 U		40	
1,1-Dichloroethene	ug/L	0.50 U	0.50 U		40	
1,2,3-Trichloropropane	ug/L	1.1 U	1.1 U		40	
1,2,4-Trimethylbenzene	ug/L	0.50 U	0.50 U		40	
1,2-Dibromo-3-chloropropane	ug/L	1.9 U	1.9 U		40	
1,2-Dibromoethane (EDB)	ug/L	0.31 U	0.31 U		40	
1,2-Dichlorobenzene	ug/L	0.50 U	0.50 U		40	
1,2-Dichloroethane	ug/L	0.50 U	0.50 U		40	
1,2-Dichloroethene (Total)	ug/L	0.27 U	0.27 U		40	N2
1,2-Dichloropropane	ug/L	0.23 U	0.23 U		40	
1,3,5-Trimethylbenzene	ug/L	0.50 U	0.50 U		40	
1,4-Dichlorobenzene	ug/L	0.50 U	0.50 U		40	
2-Butanone (MEK)	ug/L	5.0 U	5.0 U		40	J(v3)
2-Hexanone	ug/L	0.85 U	0.85 U		40	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	0.32 U		40	
Acetone	ug/L	5.3 I	7.5 I		40	J(v3)
Acetonitrile	ug/L	24.5 U	24.5 U		40	J(v2)
Benzene	ug/L	0.10 U	0.10 U		40	
Bromochloromethane	ug/L	0.37 U	0.37 U		40	
Bromodichloromethane	ug/L	0.19 U	0.19 U		40	
Bromoform	ug/L	2.6 U	2.6 U		40	
Bromomethane	ug/L	4.0 U	4.0 U		40	J(v2)
Carbon disulfide	ug/L	0.45 U	0.45 U		40	
Carbon tetrachloride	ug/L	0.50 U	0.50 U		40	
Chlorobenzene	ug/L	0.50 U	0.50 U		40	
Chloroethane	ug/L	3.7 U	3.7 U		40	
Chloroform	ug/L	0.50 U	0.50 U		40	
Chloromethane	ug/L	0.97 U	0.97 U		40	J(v2)
cis-1,2-Dichloroethene	ug/L	0.50 U	0.50 U		40	
cis-1,3-Dichloropropene	ug/L	0.17 U	0.17 U		40	
Dibromochloromethane	ug/L	0.45 U	0.45 U		40	
Dibromomethane	ug/L	0.68 U	0.68 U		40	
Ethylbenzene	ug/L	0.50 U	0.50 U		40	
Iodomethane	ug/L	9.3 U	9.3 U		40	J(v2)
Isopropylbenzene (Cumene)	ug/L	0.50 U	0.50 U		40	

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### QUALITY CONTROL DATA

Project: JEA BEVERLY HILL

Pace Project No.: 35508497

SAMPLE DUPLICATE: 3175043

Parameter	Units	35508182002 Result	Dup Result	RPD	Max RPD	Qualifiers
m&p-Xylene	ug/L	1.0 U	1.0 U		40	
Methyl-tert-butyl ether	ug/L	0.50 U	0.50 U		40	
Methylene Chloride	ug/L	2.0 U	2.0 U		40	
o-Xylene	ug/L	0.50 U	0.50 U		40	
Styrene	ug/L	0.26 U	0.26 U		40	
Tetrachloroethene	ug/L	0.50 U	0.50 U		40	
Toluene	ug/L	0.50 U	0.50 U		40	
trans-1,2-Dichloroethene	ug/L	0.50 U	0.50 U		40	
trans-1,3-Dichloropropene	ug/L	0.17 U	0.17 U		40	
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	2.5 U		40	J(v2)
Trichloroethene	ug/L	0.50 U	0.50 U		40	
Trichlorofluoromethane	ug/L	0.35 U	0.35 U		40	
Vinyl acetate	ug/L	0.19 U	0.19 U		40	
Vinyl chloride	ug/L	0.50 U	0.50 U		40	
Xylene (Total)	ug/L	1.0 U	1.0 U		40	
1,2-Dichloroethane-d4 (S)	%	103	100		40	
4-Bromofluorobenzene (S)	%	94	96		40	
Toluene-d8 (S)	%	102	101		40	

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### QUALITY CONTROL DATA

Project: JEA BEVERLY HILL  
Pace Project No.: 35508497

QC Batch: 584224 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV  
Associated Lab Samples: 35508497001

METHOD BLANK: 3176352 Matrix: Water  
Associated Lab Samples: 35508497001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	1.0	0.32	11/05/19 01:20	
1,1,1-Trichloroethane	ug/L	0.30 U	1.0	0.30	11/05/19 01:20	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	0.50	0.20	11/05/19 01:20	
1,1,2-Trichloroethane	ug/L	0.30 U	1.0	0.30	11/05/19 01:20	
1,1-Dichloroethane	ug/L	0.34 U	1.0	0.34	11/05/19 01:20	
1,1-Dichloroethene	ug/L	0.50 U	1.0	0.50	11/05/19 01:20	
1,2,3-Trichloropropane	ug/L	1.1 U	2.0	1.1	11/05/19 01:20	
1,2,4-Trimethylbenzene	ug/L	0.50 U	1.0	0.50	11/05/19 01:20	
1,2-Dibromo-3-chloropropane	ug/L	1.9 U	5.0	1.9	11/05/19 01:20	
1,2-Dibromoethane (EDB)	ug/L	0.31 U	1.0	0.31	11/05/19 01:20	
1,2-Dichlorobenzene	ug/L	0.50 U	1.0	0.50	11/05/19 01:20	
1,2-Dichloroethane	ug/L	0.50 U	1.0	0.50	11/05/19 01:20	
1,2-Dichloroethene (Total)	ug/L	0.27 U	1.0	0.27	11/05/19 01:20	N2
1,2-Dichloropropane	ug/L	0.23 U	1.0	0.23	11/05/19 01:20	
1,3,5-Trimethylbenzene	ug/L	0.50 U	1.0	0.50	11/05/19 01:20	
1,4-Dichlorobenzene	ug/L	0.50 U	1.0	0.50	11/05/19 01:20	
2-Butanone (MEK)	ug/L	5.0 U	10.0	5.0	11/05/19 01:20	
2-Hexanone	ug/L	0.85 U	10.0	0.85	11/05/19 01:20	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	10.0	0.32	11/05/19 01:20	
Acetone	ug/L	5.3 U	20.0	5.3	11/05/19 01:20	J(v2)
Acetonitrile	ug/L	24.5 U	40.0	24.5	11/05/19 01:20	J(v2)
Benzene	ug/L	0.10 U	1.0	0.10	11/05/19 01:20	
Bromochloromethane	ug/L	0.37 U	1.0	0.37	11/05/19 01:20	
Bromodichloromethane	ug/L	0.19 U	0.60	0.19	11/05/19 01:20	
Bromoform	ug/L	2.6 U	3.0	2.6	11/05/19 01:20	
Bromomethane	ug/L	4.0 U	5.0	4.0	11/05/19 01:20	J(v2)
Carbon disulfide	ug/L	0.45 U	10.0	0.45	11/05/19 01:20	
Carbon tetrachloride	ug/L	0.50 U	3.0	0.50	11/05/19 01:20	
Chlorobenzene	ug/L	0.50 U	1.0	0.50	11/05/19 01:20	
Chloroethane	ug/L	3.7 U	10.0	3.7	11/05/19 01:20	
Chloroform	ug/L	0.50 U	1.0	0.50	11/05/19 01:20	
Chloromethane	ug/L	0.97 U	1.0	0.97	11/05/19 01:20	
cis-1,2-Dichloroethene	ug/L	0.50 U	1.0	0.50	11/05/19 01:20	
cis-1,3-Dichloropropene	ug/L	0.17 U	0.50	0.17	11/05/19 01:20	
Dibromochloromethane	ug/L	0.45 U	2.0	0.45	11/05/19 01:20	
Dibromomethane	ug/L	0.68 U	2.0	0.68	11/05/19 01:20	
Ethylbenzene	ug/L	0.50 U	1.0	0.50	11/05/19 01:20	
Iodomethane	ug/L	9.3 U	10.0	9.3	11/05/19 01:20	J(v2)
Isopropylbenzene (Cumene)	ug/L	0.50 U	1.0	0.50	11/05/19 01:20	
m&p-Xylene	ug/L	1.0 U	4.0	1.0	11/05/19 01:20	
Methyl-tert-butyl ether	ug/L	0.50 U	2.0	0.50	11/05/19 01:20	

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### QUALITY CONTROL DATA

Project: JEA BEVERLY HILL

Pace Project No.: 35508497

METHOD BLANK: 3176352

Matrix: Water

Associated Lab Samples: 35508497001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Methylene Chloride	ug/L	2.0 U	5.0	2.0	11/05/19 01:20	
o-Xylene	ug/L	0.50 U	1.0	0.50	11/05/19 01:20	
Styrene	ug/L	0.26 U	1.0	0.26	11/05/19 01:20	
Tetrachloroethene	ug/L	0.50 U	1.0	0.50	11/05/19 01:20	
Toluene	ug/L	0.50 U	1.0	0.50	11/05/19 01:20	
trans-1,2-Dichloroethene	ug/L	0.50 U	1.0	0.50	11/05/19 01:20	
trans-1,3-Dichloropropene	ug/L	0.17 U	0.50	0.17	11/05/19 01:20	
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	10.0	2.5	11/05/19 01:20	
Trichloroethene	ug/L	0.50 U	1.0	0.50	11/05/19 01:20	
Trichlorofluoromethane	ug/L	0.35 U	1.0	0.35	11/05/19 01:20	
Vinyl acetate	ug/L	0.19 U	10.0	0.19	11/05/19 01:20	
Vinyl chloride	ug/L	0.50 U	1.0	0.50	11/05/19 01:20	
Xylene (Total)	ug/L	1.0 U	5.0	1.0	11/05/19 01:20	
1,2-Dichloroethane-d4 (S)	%	98	70-130		11/05/19 01:20	
4-Bromofluorobenzene (S)	%	95	70-130		11/05/19 01:20	
Toluene-d8 (S)	%	100	70-130		11/05/19 01:20	

LABORATORY CONTROL SAMPLE: 3176353

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	21.0	105	70-130	
1,1,1-Trichloroethane	ug/L	20	21.2	106	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	20.4	102	68-125	
1,1,2-Trichloroethane	ug/L	20	19.9	100	70-130	
1,1-Dichloroethane	ug/L	20	20.5	103	70-130	
1,1-Dichloroethene	ug/L	20	19.2	96	66-133	
1,2,3-Trichloropropane	ug/L	20	19.3	96	62-127	
1,2,4-Trimethylbenzene	ug/L	20	21.0	105	70-130	
1,2-Dibromo-3-chloropropane	ug/L	20	17.2	86	45-137	
1,2-Dibromoethane (EDB)	ug/L	20	19.8	99	70-130	
1,2-Dichlorobenzene	ug/L	20	20.2	101	70-130	
1,2-Dichloroethane	ug/L	20	17.8	89	70-130	
1,2-Dichloroethene (Total)	ug/L	40	36.4	91	70-130	N2
1,2-Dichloropropane	ug/L	20	20.0	100	70-130	
1,3,5-Trimethylbenzene	ug/L	20	20.8	104	70-130	
1,4-Dichlorobenzene	ug/L	20	19.6	98	70-130	
2-Butanone (MEK)	ug/L	40	33.6	84	47-143	
2-Hexanone	ug/L	40	33.5	84	48-145	
4-Methyl-2-pentanone (MIBK)	ug/L	40	36.2	90	57-132	
Acetone	ug/L	40	27.8	70	46-148	J(v3)
Acetonitrile	ug/L	200	148	74	33-175	J(v3)
Benzene	ug/L	20	20.3	102	70-130	
Bromochloromethane	ug/L	20	17.8	89	70-130	
Bromodichloromethane	ug/L	20	20.4	102	70-130	

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### QUALITY CONTROL DATA

Project: JEA BEVERLY HILL

Pace Project No.: 35508497

LABORATORY CONTROL SAMPLE: 3176353

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromoform	ug/L	20	16.9	84	49-126	
Bromomethane	ug/L	20	6.0	30	10-165	J(v3)
Carbon disulfide	ug/L	20	19.1	95	60-141	
Carbon tetrachloride	ug/L	20	19.4	97	63-126	
Chlorobenzene	ug/L	20	19.9	100	70-130	
Chloroethane	ug/L	20	21.9	110	71-142	
Chloroform	ug/L	20	19.8	99	70-130	
Chloromethane	ug/L	20	19.3	97	40-140	
cis-1,2-Dichloroethene	ug/L	20	18.8	94	70-130	
cis-1,3-Dichloropropene	ug/L	20	18.6	93	70-130	
Dibromochloromethane	ug/L	20	17.9	89	62-118	
Dibromomethane	ug/L	20	18.3	92	70-130	
Ethylbenzene	ug/L	20	20.5	103	70-130	
Iodomethane	ug/L	40	21.6	54	10-164	J(v3)
Isopropylbenzene (Cumene)	ug/L	20	21.8	109	70-130	
m&p-Xylene	ug/L	40	42.3	106	70-130	
Methyl-tert-butyl ether	ug/L	20	17.0	85	64-124	
Methylene Chloride	ug/L	20	19.9	99	65-136	
o-Xylene	ug/L	20	20.3	102	70-130	
Styrene	ug/L	20	21.9	109	70-130	
Tetrachloroethene	ug/L	20	20.4	102	64-134	
Toluene	ug/L	20	21.1	105	70-130	
trans-1,2-Dichloroethene	ug/L	20	17.6	88	68-127	
trans-1,3-Dichloropropene	ug/L	20	18.5	92	65-121	
trans-1,4-Dichloro-2-butene	ug/L	20	16.8	84	42-129	
Trichloroethene	ug/L	20	19.8	99	70-130	
Trichlorofluoromethane	ug/L	20	20.3	101	65-135	
Vinyl acetate	ug/L	20	16.9	85	60-144	
Vinyl chloride	ug/L	20	20.6	103	68-131	
Xylene (Total)	ug/L	60	62.6	104	70-130	
1,2-Dichloroethane-d4 (S)	%			100	70-130	
4-Bromofluorobenzene (S)	%			100	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE SAMPLE: 3176413

Parameter	Units	35508176003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	20	17.8	89	70-130	
1,1,1-Trichloroethane	ug/L	0.30 U	20	19.5	98	70-130	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	20	17.3	86	68-125	
1,1,2-Trichloroethane	ug/L	0.30 U	20	17.1	86	70-130	
1,1-Dichloroethane	ug/L	0.34 U	20	18.4	92	70-130	
1,1-Dichloroethene	ug/L	0.50 U	20	18.0	90	66-133	
1,2,3-Trichloropropane	ug/L	1.1 U	20	16.1	80	62-127	
1,2,4-Trimethylbenzene	ug/L	0.50 U	20	17.5	87	70-130	

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### QUALITY CONTROL DATA

Project: JEA BEVERLY HILL

Pace Project No.: 35508497

MATRIX SPIKE SAMPLE: 3176413

Parameter	Units	35508176003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	1.9 U	20	15.1	75	45-137	
1,2-Dibromoethane (EDB)	ug/L	0.31 U	20	16.5	83	70-130	
1,2-Dichlorobenzene	ug/L	0.50 U	20	16.9	85	70-130	
1,2-Dichloroethane	ug/L	0.50 U	20	15.6	78	70-130	
1,2-Dichloroethene (Total)	ug/L	0.27 U	40	31.1	78	70-130	N2
1,2-Dichloropropane	ug/L	0.23 U	20	17.2	86	70-130	
1,3,5-Trimethylbenzene	ug/L	0.50 U	20	17.6	88	70-130	
1,4-Dichlorobenzene	ug/L	0.50 U	20	16.3	82	70-130	
2-Butanone (MEK)	ug/L	5.0 U	40	25.6	64	47-143	
2-Hexanone	ug/L	0.85 U	40	27.5	69	48-145	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	40	30.8	77	57-132	
Acetone	ug/L	5.3 U	40	21.7	54	46-148	J(v3)
Acetonitrile	ug/L	24.5 U	200	117	59	33-175	J(v3)
Benzene	ug/L	0.10 U	20	17.7	89	70-130	
Bromochloromethane	ug/L	0.37 U	20	15.2	76	70-130	
Bromodichloromethane	ug/L	0.19 U	20	17.5	87	70-130	
Bromoform	ug/L	2.6 U	20	14.7	73	49-126	
Bromomethane	ug/L	4.0 U	20	4.0 U	14	10-165	J(v3)
Carbon disulfide	ug/L	0.45 U	20	18.4	91	60-141	
Carbon tetrachloride	ug/L	0.50 U	20	18.1	91	63-126	
Chlorobenzene	ug/L	0.50 U	20	17.1	85	70-130	
Chloroethane	ug/L	3.7 U	20	20.9	105	71-142	
Chloroform	ug/L	0.50 U	20	17.6	88	70-130	
Chloromethane	ug/L	0.97 U	20	16.0	80	40-140	
cis-1,2-Dichloroethene	ug/L	0.50 U	20	16.0	80	70-130	
cis-1,3-Dichloropropene	ug/L	0.17 U	20	13.8	69	70-130	J(M1)
Dibromochloromethane	ug/L	0.45 U	20	15.0	75	62-118	
Dibromomethane	ug/L	0.68 U	20	15.0	75	70-130	
Ethylbenzene	ug/L	0.50 U	20	17.7	88	70-130	
Iodomethane	ug/L	9.3 U	40	9.3 U	20	10-164	J(v3)
Isopropylbenzene (Cumene)	ug/L	0.50 U	20	18.7	93	70-130	
m&p-Xylene	ug/L	1.0 U	40	36.1	90	70-130	
Methyl-tert-butyl ether	ug/L	0.50 U	20	14.4	72	64-124	
Methylene Chloride	ug/L	2.0 U	20	17.3	86	65-136	
o-Xylene	ug/L	0.50 U	20	17.2	86	70-130	
Styrene	ug/L	0.26 U	20	18.0	90	70-130	
Tetrachloroethene	ug/L	0.50 U	20	15.7	79	64-134	
Toluene	ug/L	0.50 U	20	18.3	91	70-130	
trans-1,2-Dichloroethene	ug/L	0.50 U	20	15.1	76	68-127	
trans-1,3-Dichloropropene	ug/L	0.17 U	20	14.3	72	65-121	
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	20	13.2	66	42-129	
Trichloroethene	ug/L	0.50 U	20	16.8	84	70-130	
Trichlorofluoromethane	ug/L	0.35 U	20	20.0	100	65-135	
Vinyl acetate	ug/L	0.19 U	20	12.0	60	60-144	
Vinyl chloride	ug/L	0.50 U	20	19.3	97	68-131	
Xylene (Total)	ug/L	1.0 U	60	53.3	89	70-130	
1,2-Dichloroethane-d4 (S)	%				101	70-130	

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### QUALITY CONTROL DATA

Project: JEA BEVERLY HILL

Pace Project No.: 35508497

MATRIX SPIKE SAMPLE: 3176413		35508176003	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
4-Bromofluorobenzene (S)	%				99	70-130	
Toluene-d8 (S)	%				100	70-130	

SAMPLE DUPLICATE: 3176354

Parameter	Units	35508176004	Dup	RPD	Max	Qualifiers
		Result	Result		RPD	
1,1,1,2-Tetrachloroethane	ug/L	0.32 U	0.32 U		40	
1,1,1-Trichloroethane	ug/L	0.30 U	0.30 U		40	
1,1,2,2-Tetrachloroethane	ug/L	0.20 U	0.20 U		40	
1,1,2-Trichloroethane	ug/L	0.30 U	0.30 U		40	
1,1-Dichloroethane	ug/L	0.34 U	0.34 U		40	
1,1-Dichloroethene	ug/L	0.50 U	0.50 U		40	
1,2,3-Trichloropropane	ug/L	1.1 U	1.1 U		40	
1,2,4-Trimethylbenzene	ug/L	0.50 U	0.50 U		40	
1,2-Dibromo-3-chloropropane	ug/L	1.9 U	1.9 U		40	
1,2-Dibromoethane (EDB)	ug/L	0.31 U	0.31 U		40	
1,2-Dichlorobenzene	ug/L	0.50 U	0.50 U		40	
1,2-Dichloroethane	ug/L	0.50 U	0.50 U		40	
1,2-Dichloroethene (Total)	ug/L	0.27 U	0.27 U		40	N2
1,2-Dichloropropane	ug/L	0.23 U	0.23 U		40	
1,3,5-Trimethylbenzene	ug/L	0.50 U	0.50 U		40	
1,4-Dichlorobenzene	ug/L	0.50 U	0.50 U		40	
2-Butanone (MEK)	ug/L	5.0 U	5.0 U		40	
2-Hexanone	ug/L	0.85 U	0.85 U		40	
4-Methyl-2-pentanone (MIBK)	ug/L	0.32 U	0.32 U		40	
Acetone	ug/L	5.3 U	5.3 U		40	J(v2)
Acetonitrile	ug/L	24.5 U	24.5 U		40	J(v2)
Benzene	ug/L	0.10 U	0.10 U		40	
Bromochloromethane	ug/L	0.37 U	0.37 U		40	
Bromodichloromethane	ug/L	0.19 U	0.19 U		40	
Bromoform	ug/L	2.6 U	2.6 U		40	
Bromomethane	ug/L	4.0 U	4.0 U		40	J(v2)
Carbon disulfide	ug/L	0.45 U	0.45 U		40	
Carbon tetrachloride	ug/L	0.50 U	0.50 U		40	
Chlorobenzene	ug/L	0.50 U	0.50 U		40	
Chloroethane	ug/L	3.7 U	3.7 U		40	
Chloroform	ug/L	0.50 U	0.50 U		40	
Chloromethane	ug/L	0.97 U	0.97 U		40	
cis-1,2-Dichloroethene	ug/L	0.50 U	0.50 U		40	
cis-1,3-Dichloropropene	ug/L	0.17 U	0.17 U		40	
Dibromochloromethane	ug/L	0.45 U	0.45 U		40	
Dibromomethane	ug/L	0.68 U	0.68 U		40	
Ethylbenzene	ug/L	0.50 U	0.50 U		40	
Iodomethane	ug/L	9.3 U	9.3 U		40	J(v2)
Isopropylbenzene (Cumene)	ug/L	0.50 U	0.50 U		40	

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### QUALITY CONTROL DATA

Project: JEA BEVERLY HILL

Pace Project No.: 35508497

SAMPLE DUPLICATE: 3176354

Parameter	Units	35508176004 Result	Dup Result	RPD	Max RPD	Qualifiers
m&p-Xylene	ug/L	1.0 U	1.0 U		40	
Methyl-tert-butyl ether	ug/L	0.50 U	0.50 U		40	
Methylene Chloride	ug/L	2.0 U	2.0 U		40	
o-Xylene	ug/L	0.50 U	0.50 U		40	
Styrene	ug/L	0.26 U	0.26 U		40	
Tetrachloroethene	ug/L	0.50 U	0.50 U		40	
Toluene	ug/L	0.50 U	0.50 U		40	
trans-1,2-Dichloroethene	ug/L	0.50 U	0.50 U		40	
trans-1,3-Dichloropropene	ug/L	0.17 U	0.17 U		40	
trans-1,4-Dichloro-2-butene	ug/L	2.5 U	2.5 U		40	
Trichloroethene	ug/L	0.50 U	0.50 U		40	
Trichlorofluoromethane	ug/L	0.35 U	0.35 U		40	
Vinyl acetate	ug/L	0.19 U	0.19 U		40	
Vinyl chloride	ug/L	0.50 U	0.50 U		40	
Xylene (Total)	ug/L	1.0 U	1.0 U		40	
1,2-Dichloroethane-d4 (S)	%	100	101		40	
4-Bromofluorobenzene (S)	%	94	93		40	
Toluene-d8 (S)	%	101	102		40	

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### QUALITY CONTROL DATA

Project: JEA BEVERLY HILL  
Pace Project No.: 35508497

QC Batch: 583454 Analysis Method: EPA 8270 by SIM  
QC Batch Method: EPA 3510 Analysis Description: 8270 Water PAHLV by SIM MSSV  
Associated Lab Samples: 35508497001, 35508497002

METHOD BLANK: 3172127 Matrix: Water  
Associated Lab Samples: 35508497001, 35508497002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1-Methylnaphthalene	ug/L	0.19 U	2.0	0.19	11/02/19 14:18	
2-Methylnaphthalene	ug/L	0.68 U	2.0	0.68	11/02/19 14:18	
Acenaphthene	ug/L	0.040 U	0.50	0.040	11/02/19 14:18	
Acenaphthylene	ug/L	0.030 U	0.50	0.030	11/02/19 14:18	
Anthracene	ug/L	0.043 U	0.50	0.043	11/02/19 14:18	
Benzo(a)anthracene	ug/L	0.055 U	0.10	0.055	11/02/19 14:18	
Benzo(a)pyrene	ug/L	0.12 U	0.20	0.12	11/02/19 14:18	
Benzo(b)fluoranthene	ug/L	0.027 U	0.10	0.027	11/02/19 14:18	
Benzo(g,h,i)perylene	ug/L	0.15 U	0.50	0.15	11/02/19 14:18	
Benzo(k)fluoranthene	ug/L	0.16 U	0.50	0.16	11/02/19 14:18	
Chrysene	ug/L	0.026 U	0.50	0.026	11/02/19 14:18	
Dibenz(a,h)anthracene	ug/L	0.13 U	0.15	0.13	11/02/19 14:18	
Fluoranthene	ug/L	0.018 U	0.50	0.018	11/02/19 14:18	
Fluorene	ug/L	0.088 U	0.50	0.088	11/02/19 14:18	
Indeno(1,2,3-cd)pyrene	ug/L	0.12 U	0.15	0.12	11/02/19 14:18	
Naphthalene	ug/L	0.29 U	2.0	0.29	11/02/19 14:18	
Phenanthrene	ug/L	0.16 U	0.50	0.16	11/02/19 14:18	
Pyrene	ug/L	0.032 U	0.50	0.032	11/02/19 14:18	
2-Fluorobiphenyl (S)	%	68	38-92		11/02/19 14:18	
p-Terphenyl-d14 (S)	%	79	54-112		11/02/19 14:18	

LABORATORY CONTROL SAMPLE: 3172128

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/L	5	3.6	72	40-96	
2-Methylnaphthalene	ug/L	5	3.5	70	40-94	
Acenaphthene	ug/L	5	4.0	80	42-96	
Acenaphthylene	ug/L	5	3.7	73	39-90	
Anthracene	ug/L	5	4.3	86	46-109	
Benzo(a)anthracene	ug/L	5	4.5	90	50-116	
Benzo(a)pyrene	ug/L	5	4.6	92	48-117	
Benzo(b)fluoranthene	ug/L	5	4.7	94	51-124	
Benzo(g,h,i)perylene	ug/L	5	4.7	93	47-121	
Benzo(k)fluoranthene	ug/L	5	4.8	96	50-125	
Chrysene	ug/L	5	5.0	99	53-122	
Dibenz(a,h)anthracene	ug/L	5	4.6	92	45-123	
Fluoranthene	ug/L	5	4.4	87	52-119	
Fluorene	ug/L	5	3.8	77	44-100	
Indeno(1,2,3-cd)pyrene	ug/L	5	4.6	92	46-121	
Naphthalene	ug/L	5	3.6	72	40-91	

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: JEA BEVERLY HILL

Pace Project No.: 35508497

LABORATORY CONTROL SAMPLE: 3172128

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenanthrene	ug/L	5	4.5	89	47-111	
Pyrene	ug/L	5	4.4	89	51-120	
2-Fluorobiphenyl (S)	%			65	38-92	
p-Terphenyl-d14 (S)	%			76	54-112	

MATRIX SPIKE SAMPLE: 3172685

Parameter	Units	35508425001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/L	0.19 U	5	3.5	69	40-96	
2-Methylnaphthalene	ug/L	0.68 U	5	3.4	67	40-94	
Acenaphthene	ug/L	0.040 U	5	3.8	76	42-96	
Acenaphthylene	ug/L	0.030 U	5	3.5	70	39-90	
Anthracene	ug/L	0.043 U	5	4.4	88	46-109	
Benzo(a)anthracene	ug/L	0.055 U	5	4.6	91	50-116	
Benzo(a)pyrene	ug/L	0.12 U	5	4.6	91	48-117	
Benzo(b)fluoranthene	ug/L	0.027 U	5	4.6	92	51-124	
Benzo(g,h,i)perylene	ug/L	0.15 U	5	4.6	91	47-121	
Benzo(k)fluoranthene	ug/L	0.16 U	5	4.8	95	50-125	
Chrysene	ug/L	0.026 U	5	4.9	99	53-122	
Dibenz(a,h)anthracene	ug/L	0.13 U	5	4.6	91	45-123	
Fluoranthene	ug/L	0.018 U	5	4.5	90	52-119	
Fluorene	ug/L	0.088 U	5	3.7	74	44-100	
Indeno(1,2,3-cd)pyrene	ug/L	0.12 U	5	4.5	91	46-121	
Naphthalene	ug/L	0.29 U	5	3.6	72	40-91	
Phenanthrene	ug/L	0.16 U	5	4.4	88	47-111	
Pyrene	ug/L	0.032 U	5	4.5	90	51-120	
2-Fluorobiphenyl (S)	%				63	38-92	
p-Terphenyl-d14 (S)	%				77	54-112	

SAMPLE DUPLICATE: 3172686

Parameter	Units	35508497001 Result	Dup Result	RPD	Max RPD	Qualifiers
1-Methylnaphthalene	ug/L	0.19 U	0.19 U		40	
2-Methylnaphthalene	ug/L	0.68 U	0.68 U		40	
Acenaphthene	ug/L	0.040 U	0.040 U		40	
Acenaphthylene	ug/L	0.030 U	0.030 U		40	
Anthracene	ug/L	0.043 U	0.043 U		40	
Benzo(a)anthracene	ug/L	0.055 U	0.055 U		40	
Benzo(a)pyrene	ug/L	0.12 U	0.12 U		40	
Benzo(b)fluoranthene	ug/L	0.027 U	0.027 U		40	
Benzo(g,h,i)perylene	ug/L	0.15 U	0.15 U		40	
Benzo(k)fluoranthene	ug/L	0.16 U	0.16 U		40	
Chrysene	ug/L	0.026 U	0.026 U		40	
Dibenz(a,h)anthracene	ug/L	0.13 U	0.13 U		40	

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### QUALITY CONTROL DATA

Project: JEA BEVERLY HILL

Pace Project No.: 35508497

SAMPLE DUPLICATE: 3172686

Parameter	Units	35508497001 Result	Dup Result	RPD	Max RPD	Qualifiers
Fluoranthene	ug/L	0.018 U	0.018 U		40	
Fluorene	ug/L	0.088 U	0.088 U		40	
Indeno(1,2,3-cd)pyrene	ug/L	0.12 U	0.12 U		40	
Naphthalene	ug/L	0.29 U	0.29 U		40	
Phenanthrene	ug/L	0.16 U	0.16 U		40	
Pyrene	ug/L	0.032 U	0.032 U		40	
2-Fluorobiphenyl (S)	%	65	67			
p-Terphenyl-d14 (S)	%	77	77			

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### REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: JEA BEVERLY HILL

Pace Project No.: 35508497

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### LABORATORIES

PASI-O Pace Analytical Services - Ormond Beach

### ANALYTE QUALIFIERS

I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

U Compound was analyzed for but not detected.

J(L2) Estimated Value. Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

J(M0) Estimated Value. Matrix spike recovery was outside laboratory control limits.

J(M1) Estimated Value. Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

J(v2) The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.

J(v3) The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have a low bias.

N2 The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: JEA BEVERLY HILL

Pace Project No.: 35508497

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
35508497001	BH-TMW-1	EPA 3010	583134	EPA 6020	583218
35508497002	BH-TMW-2	EPA 3010	583134	EPA 6020	583218
35508497001	BH-TMW-1	EPA 3510	583454	EPA 8270 by SIM	583689
35508497002	BH-TMW-2	EPA 3510	583454	EPA 8270 by SIM	583689
35508497001	BH-TMW-1	EPA 8260	584224		
35508497002	BH-TMW-2	EPA 8260	583908		

### REPORT OF LABORATORY ANALYSIS

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WO#: 35508497



35508497

**STODY / Analytical Request Document**

is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

ion C

ice Information:

Page: 1 Of 1

**Section A**

**Required Client Information:**

Company: Meskel & Associates Engineering, Inc.  
 Address: 12348 Guava Court Jacksonville, FL 32225  
 Email: g.pastrana@outlook.com  
 Phone: NONE  
 Fax:  
 Requested Due Date:  
 Report To: Gabriel Pastrana, P.E.  
 Copy To: GABRIEL PASTRANA  
 Project Name: JEA Beverly Hill  
 Project #: 0006-0033  
 Purchase Order #:  
 Attention: Pace Project Manager: todd.rea@pacelabs.com.  
 Pace Quote: 10619-12  
 Regulatory Agency  
 State / Location: FL

ITEM #	MATRIX	CODE	COLLECTED		SAMPLE TYPE (G=GRAB C=COMP)	MATRIX CODE (see valid codes to left)	# OF CONTAINERS	Preservatives	Analyses Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	TEMP in C	Received on	Ice (Y/N)	Custody Sealed (Y/N)	Cooler (Y/N)	Samples Intact (Y/N)	
			START DATE TIME	END DATE TIME														
1	Drinking Water	DW	10/29/19	14:15	G	WT	6	H2SO4 Unpreserved	VOC by 8260 PAH 8270 by SIM RCRA 4 Total (6020) RCRA 4 Dissolved (6020)									
2	Water	WT	10/29/19	13:46	G	WTG	6	HCl HNO3 NaOH Na2S2O3 Methanol Other										
3	Waste Water	WW																
4	Product	P																
5	Soil/Solid	SL																
6	Oil	OL																
7	Wipe	WP																
8	Air	AR																
9	Other	OT																
10	Tissue	TS																
11																		
12																		

ADDITIONAL COMMENTS: EMPTY CONTAINERS  
 RELINQUISHED BY / AFFILIATION: MHC PACE  
 DATE: 10/28/2019  
 TIME: 1100  
 ACCEPTED BY / AFFILIATION: MHC PACE  
 DATE: 10/29/19  
 TIME: 12:10  
 SAMPLE CONDITIONS: 10/29/19 0900  
 10/29/19 1210  
 10/29/19 1700  
 10/29/19 0030  
 600  
 1  
 SAMPLER NAME AND SIGNATURE: GABRIEL PASTRANA  
 PRINT Name of SAMPLER: GABRIEL PASTRANA  
 SIGNATURE of SAMPLER: [Signature]  
 DATE Signed: 10/30/19



Document Name:  
Sample Condition Upon Receipt Form  
Document No.:  
F-FL-C-007 rev. 13

Document Revised:  
May 30, 2018  
Issuing Authority:  
Pace Florida Quality Office

**WO# : 35508497**

**Project #**  
**Project Manager:**  
**Client:**

PM: TSR  
Due Date: 11/06/19  
CLIENT: MEASEN

**Signature and Initials of person:**  
Examining contents: \_\_\_\_\_  
Label: \_\_\_\_\_  
Liver: \_\_\_\_\_  
pH: \_\_\_\_\_

Thermometer Used: T-358 Date: 10/31/19 Time: 00:40 Initials: JMT

State of Origin: \_\_\_\_\_  For WV projects, all containers verified to ≤6 °C

- Cooler #1 Temp. °C 6.0 (Visual) 0 (Correction Factor) 6.0 (Actual)  Samples on ice, cooling process has begun
- Cooler #2 Temp. °C \_\_\_\_\_ (Visual) \_\_\_\_\_ (Correction Factor) \_\_\_\_\_ (Actual)  Samples on ice, cooling process has begun
- Cooler #3 Temp. °C \_\_\_\_\_ (Visual) \_\_\_\_\_ (Correction Factor) \_\_\_\_\_ (Actual)  Samples on ice, cooling process has begun
- Cooler #4 Temp. °C \_\_\_\_\_ (Visual) \_\_\_\_\_ (Correction Factor) \_\_\_\_\_ (Actual)  Samples on ice, cooling process has begun
- Cooler #5 Temp. °C \_\_\_\_\_ (Visual) \_\_\_\_\_ (Correction Factor) \_\_\_\_\_ (Actual)  Samples on ice, cooling process has begun
- Cooler #6 Temp. °C \_\_\_\_\_ (Visual) \_\_\_\_\_ (Correction Factor) \_\_\_\_\_ (Actual)  Samples on ice, cooling process has begun

- Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace  Other \_\_\_\_\_
- Shipping Method:  First Overnight  Priority Overnight  Standard Overnight  Ground  International Priority  Other \_\_\_\_\_

- Billing:  Recipient  Sender  Third Party  Credit Card  Unknown

Tracking # \_\_\_\_\_

- Custody Seal on Cooler/Box Present:  Yes  No Seals intact:  Yes  No Ice: Wet Blue Dry None
- Packing Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_
- Samples shorted to lab (if Yes, complete) Shorted Date: \_\_\_\_\_ Shorted Time: \_\_\_\_\_ Qty: \_\_\_\_\_

**Comments:**

Chain of Custody Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Chain of Custody Filled Out	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Relinquished Signature & Sampler Name COC	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples Arrived within Hold Time	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Rush TAT requested on COC	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Sufficient Volume	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Correct Containers Used	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Sample Labels match COC (sample IDs & date/time of collection)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
All containers needing acid/base preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Preservation Information: Preservative: _____ Lot #/Trace #: _____ Date: _____ Time: _____ Initials: _____
All Containers needing preservation are found to be in compliance with EPA recommendation: Exceptions: VOA, Coliform, TOC, O&G, Carbamates	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Headspace in VOA Vials? (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	

**Client Notification/ Resolution:**  
Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

**Comments/ Resolution (use back for additional comments):**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*Appendix D*

---



**NOTICE OF INTENT  
TO USE THE GENERIC PERMIT  
FOR DISCHARGE OF GROUND WATER  
FROM DEWATERING OPERATIONS  
(subsection 62-621.300(2), F.A.C.)**

**PART I INSTRUCTIONS**

A. Will dewatering operations be performed as part of construction activities?

NO Continue completing this form.

YES You may elect to obtain coverage under the Generic Permit for Stormwater Discharge from Large and Small Construction Activities (CGP), DEP Form 62-621.300(4)(b), which will cover both the construction and dewatering operations.

B. This Notice of Intent (NOI) form shall be completed and submitted to the industrial wastewater program at the local DEP office as part of the request for coverage under the Generic Permit for Discharge of Ground Water from Dewatering Operations subsection 62-621.300(2)(a), F.A.C., at least 14 days prior to planned commencement of discharge. For the purposes of this generic permit, 'dewatering operations' means temporarily lowering the water table by draining or pumping of ground water from activities such as excavations, building foundations, vaults, trenches and aquifer performance tests for exploratory purposes. Applicants should be familiar with the rule, generic permit document and instructions before completing this NOI form. Attach additional information on separate sheets as necessary.

1. Submit this completed form and supporting documentation and the \$100.00 application fee to the industrial wastewater program at the local DEP office. Electronic submittal is preferred and may be available at <http://www.dep.state.fl.us/water/wastewater/iw/iw-forms.htm>. To locate a local DEP office, go to:

<http://www.dep.state.fl.us/secretary/dist/default.htm>.

2. Checks should be payable to the Florida Department of Environmental Protection. **DEP will not process this form without the appropriate fee.**

3. If an item is not applicable to your project, indicate "NA" in the appropriate space provided.

**PART II DEWATERING INFORMATION:**

A. Is the project site currently identified as contaminated, or is there a site within 500 feet of the dewatering project identified as contaminated, by a DEP or EPA cleanup/restoration program? You may use the Quick Links to DEP's Contamination Locator Map (CLM) and DEP's Institutional Controls Registry (ICR) Web Viewer to determine cleanup restoration status. You may access the CLM at: <http://webapps.dep.state.fl.us/DepClnup/welcome.do>, or <http://ca.dep.state.fl.us/mapdirect/?focus=contamlocator>. The ICR may be accessed at: <http://www.dep.state.fl.us/waste/categories/brownfields/pages/ICR.htm>, or <http://ca.dep.state.fl.us/mapdirect/?focus=icr>

YES Continue to B.

NO Continue to D.

B. Has the site been remediated?

YES Continue to D.

NO Continue to C.

C. Are the pollutants of concern (i.e. contamination) present in ground water at the dewatering project site at concentrations equal to or exceeding the surface water criteria in Rule 62-302.530?

YES Dewatering operations do not qualify for coverage under this generic permit. However, the site may qualify for coverage under Rule 62-621.300(1), F.A.C., or under an individual wastewater permit on the appropriate form listed in Rule 62-620.910, F.A.C.

NO Continue to D.

D. Have Best Management Practices (BMPs) for this generic permit been developed or addressed in an existing BMP plan in accordance to the requirements of this generic permit. BMPs must be implemented upon commencement of the discharge

YES Continue to Part III.

NO Your application cannot be processed until this item is complete.

NOTE: Chemical treatment is allowed as described in the Best Management Practices of the Generic Permit. However, sites that use cationic treatment chemicals are not eligible for coverage under Generic Permit for Discharge of Ground Water from Dewatering Operations unless concurrence from the applicable local DEP office is obtained in advance of the submittal of this NOI. Appropriate controls and implementation procedures designed to ensure that the use of cationic treatment chemicals will not cause or contribute to a violation of water quality standards shall be included in the site specific BMPs.

### PART III DISCHARGE INFORMATION:

A. Please identify receiving surface water body.

### PART IV SITE INFORMATION

#### A. COVERAGE STATUS:

1. Is this application for new coverage or for renewal of coverage under the generic permit?	New <input type="checkbox"/> Renewal <input type="checkbox"/>
2. If this application is for renewal of coverage under the generic permit, provide the FLG No.	FLG No:

#### B. NAME OF SITE:

Site Name:

**C. PERMITTEE INFORMATION:**

1. Name:		2. Title (Owner, Operator, Contractor, etc.):	
3. Phone No.: (    )       -		4. Fax No.: (    )       -	
4. Email Address:			
5. Street or P. O. Box:			
6. City or Town:		7. State:	8. Zip Code:

**D. SITE LOCATION INFORMATION:**

1. Street, Route or Other Specific Identifier:			
2. County:			
3. City or Town:		4. State:	5. Zip Code:
6. Latitude:    °       '       "		7. Longitude:    °       '       "	
8. If records required in accordance with Part V. of DEP Document 62-621.300(2)(a), are kept off-site, please provide the physical address of site where records will be kept. Note: location must be accessible for inspection of records by the Department.			

**PART V CERTIFICATIONS**

**A. OWNER OR OPERATOR<sup>1</sup>**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

\_\_\_\_\_  
Name & Official Title (type or print)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Telephone No.

\_\_\_\_\_  
Date signed

\_\_\_\_\_  
Email Address

<sup>1</sup> Signatory requirements are contained in Rule 62-620.305, F.A.C.